

DRAFT
HAZARDOUS WASTE
POST-CLOSURE PERMIT
MONSANTO COMPANY
LULING, LOUISIANA
LAD 001700756-PC-RN-1
AGENCY INTEREST 1096

PUBLIC REVIEW COPY



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

CERTIFIED MAIL 7003 2260 0005 9323 3731

Mr. George A. McGowan
Monsanto Company
12501 M South River Road
Luling, LA 70070

RE: Monsanto Company
AI 1096/ PER20040007
LAD 001700756
Draft Hazardous Waste Post-Closure Renewal Permit for EMA Basin, No. 1 Well Pond, and
AN Ponds 4&5

Dear Mr. McGowan:

Attached, is your copy of the Monsanto Company, Draft Hazardous Waste Post-Closure Permit, LAD 001700756-PC-RN-1, which incorporates language pertaining to the post-closure care and maintenance activities for EMA Basin, No. 1 Well Pond and AN Ponds 4&5, Luling Facility.

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft renewal hazardous waste operating permit. By request and if the Department finds a significant degree of public interest, a public hearing will also be scheduled at least forty-five (45) days after the date on which the public notice is given. The date, time and location of the public hearing, if requested, and specific dates for the beginning and ending of the comment period are contained in the attached public notice.

Prior to taking a final action on the final renewal permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permit decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number 1096, EPA Identification Number LAD 001700756, and Permit Activity Number PER20040007 on all future correspondence pertaining to this issue. Should you have any questions concerning this matter, please contact Mr. Will F. Steele of the Waste Services Section at (225) 219-3134.

Sincerely,

Bijan Sharafkhani, P.E.
Administrator
Waste Permits Division

wfs

Attachment

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
MONSANTO COMPANY, LULING FACILITY
DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste post-closure permit renewal for Monsanto Company, P.O. Box 174, Luling, Louisiana 70070 for the EMA Settling Basin, No. 1 Well Pond, and Corrective Action at the Ammonium Nitrate (AN) 4&5 Ponds. **The facility is located at 12501 M South River Road, Luling, St. Charles Parish.**

Monsanto Company manufactures agricultural and industrial organic specialty chemicals such as herbicides and bleaching compounds. Monsanto Company proposes to obtain a post-closure permit to address post-closure care, maintenance activities and corrective action for the EMA Settling Basin, No. 1 Well Pond, and Ammonia Nitrate (AN) 4&5 Ponds. The post-closure permit will detail the conditions Monsanto Company must adhere to to address post-closure care, maintenance activities and corrective action at the Luling Facility.

Monsanto performs correction action and post-closure groundwater monitoring under the authority of two permits, the March 6, 1995 post-closure permit for the EMA Settling Basin and the November 25, 1995 post-closure permit for the No. 1 Well Pond. The draft hazardous waste post-closure permit renewal will consolidate and update the previous post-closure permits for the EMA Settling Basin and the No. 1 Well Pond. In addition, the hazardous waste post-closure permit renewal will detail corrective measures implemented at the AN 4&5 Ponds.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Tuesday, August 14, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The hazardous waste post-closure permit renewal application, the draft post-closure renewal permit, fact sheet and supporting documents are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

An additional copy may be reviewed at the Saint Charles Parish Library, Headquarters, 105 Lakewood Drive, Luling, LA 70070.

A previous notice has been published in the Saint Charles Herald-Guide on November 20, 2004.

Inquiries or requests for additional information regarding this permit action should be directed to Will F. Steele, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3134.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmaillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft hazardous waste renewal permit and associated information can be viewed on the LDEQ permits public webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 1096, Permit Number LAD 0001700756-PC-RN-1, and Activity Number PER20040007.

Scheduled Publication Date: June 28, 2007

FACT SHEET

FACT SHEET

**FOR THE DRAFT HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT
PREPARED FOR**

**Monsanto Company
Luling Facility**

EPA ID# LAD001700756
Agency Interest # 1096

12501 M South River Road
Luling, Louisiana
St. Charles Parish

Permit Number LAD001700756-PC-RN-1
PER20040007

I. INTRODUCTION

This fact sheet has been developed in accordance with the Louisiana Administrative Code (LAC) 33:V.703.D and briefly sets forth principal and significant facts, legal, methodological and policy requirements of the proposed draft hazardous waste post-closure permit for Monsanto Company, EPA ID Number LAD001700756, Agency Interest Number 1096, for the facility located in Luling, St. Charles Parish, Louisiana.

The Louisiana Department of Environmental Quality (LDEQ) has prepared this proposed draft hazardous waste permit for post-closure which addresses the requirements of LAC Title 33, Part V, Subpart 1 and the Resource Conservation and Recovery Act (RCRA) as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA).

Monsanto Company is seeking a hazardous waste permit governing the post-closure care and maintenance activities of the EMA Settling Basin, No.1 Well Pond and corrective action at the Ammonia Nitrate (AN) Ponds 4&5 at the Luling Facility.

II. THE PERMITTING PROCESS

The purpose of this fact sheet is to initiate the permit decision process. The LDEQ's Waste Permits Division is required to prepare this draft hazardous waste permit. The draft hazardous waste permit sets forth all the applicable conditions, which the permittee is required to comply with during the life of the permit. Monsanto submitted its Hazardous Waste Part B Post-Closure Permit Application, dated September 8, 2004, to comply with the Environmental Protection Agency (EPA) and the Louisiana Administrative Code (LAC)

regulations requiring post-closure care for facilities that are permitted to treat, store or dispose of hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

The permitting process will afford the LDEQ, interested citizens, and other agencies the opportunity to evaluate the ability of the permittee to comply with the requirements of the LAC 33:V, Subpart 1, and the Hazardous and Solid Waste Amendments (HSWA) portion.

The public is given a minimum of forty-five (45) days to review and comment on the draft post-closure permit. The Administrative Authority, prior to making a decision or taking any final action on the draft permit, will consider all significant comments. The decision of the Administrative Authority shall be to issue, deny, modify, or revoke the draft post-closure permit in accordance with LAC 33:V.705.

A. NEW DRAFT HAZARDOUS WASTE RENEWAL PERMIT

The Waste Permits Division reviewed the permit application and other pertinent technical information, and prepared a draft permit that contains the language that pertains to the post-closure care and maintenance activities of the listed facilities.

This draft hazardous waste permit is a tentative determination and is not the final decision of the Administrative Authority.

B. PUBLIC COMMENT PERIOD

LAC 33:V.715 requires that the public be given at least forty-five (45) days to comment on a draft permit decision.

The specific dates for the opening and closing of the public comment period are contained in the public notice that was issued for this particular permitting action. Any person interested in commenting on the draft permit for the Monsanto Company, Luling Facility must do so within the allotted forty-five (45) day comment period.

If LDEQ finds a significant degree of public interest, a public hearing will be held. The location and time of the public hearing would be provided in a separate public notice.

Public notice of the proposed permitting action shall be published in specified newspapers, announced on a designated radio station, and mailed to those persons contained on the facility's mailing list.

C. LOCATIONS OF AVAILABLE INFORMATION

The administrative record, including all supporting documents are on file at the LDEQ Public Records Center, Room 1-127, 602 North 5th Street, Baton Rouge, Louisiana. These documents may be inspected and copied (at \$0.25 per copy page) at any time between the hours of 8:00 to 4:30 p.m., Monday through Friday (except holidays).

In addition, a copy of the draft post-closure permit, fact sheet, and supporting documents are available for review at the St. Charles Parish Library, 105 Lakewood Drive, P.O. Box 949, Luling, LA 70070-0975.

D. WRITTEN COMMENT SUBMISSION

Interested persons may submit written comments on the draft post-closure permit to the Administrative Authority, at the address listed below, on the closing date of the comment period. All comments should include:

1. the name and address of the commenter,
2. a concise statement of the exact basis for any comment and supporting relevant facts upon which the comment is based,
3. identification of the facility commented on (the EPA Identification Number and AI number), and
4. supporting relevant facts upon which the comments are based.

All comments, further requests for information (including copies of this decision and fact sheet) and any requests by public interest groups or individuals who would like to be included in the mailing list, should be made in writing to

Ms. Soumaya Ghosn
Louisiana Department of Environmental Quality
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
(225) 219-3276 or fax (225) 219-3309

Any technical questions regarding this draft permit should be addressed to:

Mr. Willard F. Steele
Louisiana Department of Environmental Quality
Office of Environmental Services
Water and Waste Permits Division
Post Office Box 4313
Baton Rouge, LA 70821-4313
(225) 219-3134 or fax (225) 219-3158

III. DESCRIPTION OF OVERALL SITE

Monsanto Company is the owner and operator of the Luling Facility. The Luling Facility opened in 1954 and Monsanto Company took possession of the plant in 1956. The Luling Facility is located on 1,550 acres of which approximately 400 acres have been developed for manufacturing purposes. The primary products manufactured at the Luling Facility are organic herbicides and bleaching compounds. The Luling Facility is located within an industrial and commercial area that is bound by Louisiana Highway 18 to the north and by U.S. Highway 90 to the south.

IV. HAZARDOUS WASTE FACILITIES

Monsanto Company submitted its Post-Closure Permit Application for the Luling Facility, which includes the EMA Settling Basin, the No.1 Well Pond and the AN Ponds 4&5. The EMA Settling Basin and the No. 1 Well Pond were permitted previously under separate post-closure RCRA permits. This draft permit renews and updates the post-closure care conditions first implemented under the previous post-closure RCRA permits.

The AN Ponds 4&5 were permitted under the previous HSWA permit issued on January 23, 1988. The investigations and final remedies for the AN Ponds 4&5 were implemented under the authority of the previous HSWA permit. This draft permit details the final remedies for corrective action implemented at the Monsanto Facility for the AN Ponds 4&5.

The Luling Facility has three land application units that are currently closed. The EMA Settling Basin and the No. 1 Well Ponds received waste after July 26, 1982, and are regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The AN 4&5 Pond did not receive waste after July 26, 1982, and are regulated under the 1984 Hazardous and Solid Waste Amendments (HSWA). All wastes addressed in this draft permit are generated on site and the Luling Facility does not accept off-site waste. The wastes generated and stored at the Luling Facility are eventually shipped to authorized hazardous waste treatment or disposal facilities. Details of the permitted unit and the permit condition are contained in this draft permit

V. FINANCIAL AND LIABILITY REQUIREMENTS

Monsanto Company has submitted documentation to satisfy the financial assurance and liability requirements of LAC 33:V, Chapters 37.

VI. IT QUESTION SUMMARY OF ANALYSIS

Pursuant to L.A.R.S.30:2018.E.3, this draft hazardous waste post-closure permit is not subject to the requirements regarding environmental assessment statements or IT Analysis (Save Ourselves v. La. Env'tl. Control Comm'n, 452 So. 2d 1152, 1159. La. 1984). Nevertheless, the LDEQ has considered factors similar to the IT Analysis in preparing this draft permit. This is a preliminary analysis based on information currently available to the LDEQ.

A. **The potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible.**

Monsanto Company submitted its Post-Closure Permit Application for the Luling Facility, which includes the EMA Settling Basin, the No.1 Well Pond and the AN Ponds 4&5. The EMA Settling Basin and the No. 1 Well Pond were permitted previously under separate post-closure RCRA permits, issued January 20, 1995 and March 15, 1994 respectively. This draft permit renews and updates the post-closure care and maintenance conditions first implemented under the previous post-closure RCRA permits.

The AN Ponds 4&5 were permitted under the previous HSWA permit issued on January 23, 1988. The investigations and final remedies for the AN Ponds 4&5 were implemented under the authority of the previous HSWA permit. This draft permit details the final remedies for corrective action implemented at the Monsanto Facility for the AN Ponds 4&5.

Monsanto Company has closed all units that were involved in the treatment and disposal of hazardous waste. The design and operation of all remaining units as detailed in this draft permit will follow the regulations to prevent the infiltration of any stored material into the environment. These actions minimize the potential and real adverse environmental effects of handling hazardous waste to the maximum extent possible. This permit does not propose the alteration of waste classifications, codes or characteristics.

- B. A cost benefit analysis of the environmental impact balanced against the social and economic benefits of the project demonstrates that the social and economic benefits outweigh environmental impacts.**

This is an existing facility submitting an application for the post-closure care and maintenance activities of its existing, closed hazardous waste storage units. The Luling Facility has been in operation for several decades. Monsanto Company has reduced the hazardous waste processing and handling activities from what had been written in the previous hazardous waste permit.

The proposed permit should have little or no affect on property values, the tax base, economic development, or public costs as they pertain to the economics of the local community. The proposed draft hazardous waste permit should not promote the need for additional fire protection, police, medical facilities, or roads.

- C. There are no alternative projects or alternative sites or mitigating measures which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable.**

1. ALTERNATIVE PROJECTS

This draft permit is for the post-closure of four hazardous waste storage units. There appears to be no known alternative projects that would offer more protection to the environment than issuing a post-closure permit for the closed units without unduly curtailing non-environmental benefits.

2. ALTERNATIVE SITE

This draft permit is for an existing facility. The hazardous waste units to be permitted were treatment and disposal units for hazardous waste that was generated on-site. Since post-closure care requirements are in place at the facility, relocating these units to a different existing or new location could result in greater environmental impact due to siting and transportation considerations, as well as increased hazardous waste production and transportation.

3. MITIGATING MEASURES

Monsanto Company has instituted post-closure requirements for the closed units that are protective of human health and the environment. No mitigating measures would offer more protection to the environment than permitting without unduly curtailing non-environmental benefits.

PUBLIC PARTICIPATION

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
MONSANTO COMPANY, LULING FACILITY
DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste post-closure permit renewal for Monsanto Company, P.O. Box 174, Luling, Louisiana 70070 for the EMA Settling Basin, No. 1 Well Pond, and Corrective Action at the Ammonium Nitrate (AN) 4&5 Ponds. **The facility is located at 12501 M South River Road, Luling, St. Charles Parish.**

Monsanto Company manufactures agricultural and industrial organic specialty chemicals such as herbicides and bleaching compounds. Monsanto Company proposes to obtain a post-closure permit to address post-closure care, maintenance activities and corrective action for the EMA Settling Basin, No. 1 Well Pond, and Ammonia Nitrate (AN) 4&5 Ponds. The post-closure permit will detail the conditions Monsanto Company must adhere to to address post-closure care, maintenance activities and corrective action at the Luling Facility.

Monsanto performs correction action and post-closure groundwater monitoring under the authority of two permits, the March 6, 1995 post-closure permit for the EMA Settling Basin and the November 25, 1995 post-closure permit for the No. 1 Well Pond. The draft hazardous waste post-closure permit renewal will consolidate and update the previous post-closure permits for the EMA Settling Basin and the No. 1 Well Pond. In addition, the hazardous waste post-closure permit renewal will detail corrective measures implemented at the AN 4&5 Ponds.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Tuesday, August 14, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The hazardous waste post-closure permit renewal application, the draft post-closure renewal permit, fact sheet and supporting documents are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

An additional copy may be reviewed at the Saint Charles Parish Library, Headquarters, 105 Lakewood Drive, Luling, LA 70070.

A previous notice has been published in the Saint Charles Herald-Guide on November 20, 2004.

Inquiries or requests for additional information regarding this permit action should be directed to Will F. Steele, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3134.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmailrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft hazardous waste renewal permit and associated information can be viewed on the LDEQ permits public webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doe.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 1096, Permit Number LAD 0001700756-PC-RN-1, and Activity Number PER20040007.

Scheduled Publication Date: June 28, 2007



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

June 22, 2007

Via Fax (225) 388-0164

Ms. Susan Bush
Legal Advertising
The Advocate
Post Office Box 588
Baton Rouge, LA 70821-0588

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

Dear Ms. Bush:

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in The Advocate *once only* on Thursday, June 28, 2007. You will also receive a copy of the legal notice itself via email at legal.ads@theadvocate.com.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Laura Ambeau (225) 325-8157 immediately upon publication. If the notice cannot be published on the date requested, please contact Ms. Ambeau (225) 219-3277 or email laura.ambeau@la.gov.

The invoice for this public notice should be sent to:

Mr. George A. McGowan, Plant Manager
Monsanto Company
12501 M South River Road
Luling, LA 70070
Phone (985) 785-8211

The official proof of publication in the form of a tear sheet should be mailed to my attention LDEQ, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313.

Thank you for assisting in our effort to serve the public.

Sincerely,
Laura M. Ambeau
Environmental Scientist, Public Participation Group

LA/Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY NEWSPAPER

The undersigned verifies that the following public notice was published in the _____ (date of publication) edition of The Advocate:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

THE ADVOCATE:

By: _____ Date: _____

Immediately upon publication please fax this form, along with a copy of the public notice as it appeared in the newspaper, to Ms. Laura Ambeau (225) 325-8157.

PLEASE NOTE:

THIS VERIFICATION DOES NOT RELIEVE THE NEWSPAPER OF THE RESPONSIBILITY OF PROVIDING OFFICIAL PROOF OF PUBLICATION, IN THE FORM OF A TEAR SHEET, TO THE LDEQ AS REQUESTED IN OUR COVER LETTER.



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

June 22, 2007

Via Fax (985) 758-7000
Phone (985) 758-2795

Ms. Torin Thomas
Saint Charles Herald-Guide
Legal Advertising
Post Office Box 1199
Boutte, LA 70039

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

Dear Ms. Thomas:

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in The Saint Charles Herald-Guide *once only* on Thursday, June 28, 2007. You will also receive a copy of the legal notice itself via email at torint@heraldguide.com.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Laura Ambeau (225) 325-8157 immediately upon publication. If the notice cannot be published on the date requested, please contact Ms. Ambeau (225) 219-3277 or email laura.ambeau@la.gov.

The invoice for this public notice should be sent to:

Mr. George A. McGowan, Plant Manager
Monsanto Company
12501 M South River Road
Luling, LA 70070
Phone (985) 785-8211

The official proof of publication in the form of a tear sheet should be mailed to my attention LDEQ, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313.

Thank you for assisting in our effort to serve the public.

Sincerely,
Laura M. Ambeau
Environmental Scientist, Public Participation Group

LA/Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY NEWSPAPER

The undersigned verifies that the following public notice was published in the _____ (date of publication) edition of **The Saint Charles Herald-Guide**:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

THE SAINT CHARLES HERALD-GUIDE:

By: _____ Date: _____

Immediately upon publication please fax this form, along with a copy of the public notice as it appeared in the newspaper, to Ms. Laura Ambeau (225) 325-8157.

PLEASE NOTE:

THIS VERIFICATION DOES NOT RELIEVE THE NEWSPAPER OF THE RESPONSIBILITY OF PROVIDING OFFICIAL PROOF OF PUBLICATION, IN THE FORM OF A TEAR SHEET, TO THE LDEQ AS REQUESTED IN OUR COVER LETTER.



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

June 22, 2007

Tel: (504) 593-1847

Fax: (504) 593-2144

Mr. Malcom Pelham
WWL-AM
1450 Poydras Street, Suite 440
New Orleans, LA 70112

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) N0 1096, LAD0001700756-PC-RN-1, PER20040007

Dear Mr. Pelham:

Please broadcast the enclosed public announcement regarding the above referenced facility *once only*, on **Thursday, June 28, 2007**.

We are requesting that as soon as the announcement has been made, please sign and date the 'Verification By Radio Station' and mail or fax to the attention of Ms. Laura Ambeau at the following address:

Ms. Laura Ambeau
Environmental Scientist
Office of Environmental Services
Environmental Assistance Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
Fax: (225) 325-8157
Email at laura.ambeau@la.gov

The charges for this service should be billed to:

Mr. George A. McGowan, Plant Manager
Monsanto Company
12501 M South River Road
Luling, LA 70070
Phone (985) 785-8211

Thank you for assisting in our effort to serve the public.

Sincerely,

Laura M. Ambeau
Environmental Scientist, Public Participation Group
LA/Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY RADIO STATION

The undersigned verifies that the attached public announcement, associated with the public notice referenced below, was broadcast on WWL-AM at _____ (time of day) on the _____ (day) of _____ (month), 2007.

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) N0 1096, LAD0001700756-PC-RN-1, PER20040007

WWL-AM:

By: _____ Date: _____

Please complete and return this form to the address listed below promptly after broadcast of the public service announcement, or fax it to the attention of Laura Ambeau at (225) 325-8157.

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

PUBLIC RADIO ANNOUNCEMENT

The Louisiana Department of Environmental Quality is accepting written comments for Monsanto Company, Luling Facility, EMA Settling Basin, No. 1 Well Pond and the Ammonium Nitrate 4 & 5 Ponds. **The facility is located at 12501 M South River Road, Luling, LA 70070, Saint Charles Parish.**

Monsanto requested a hazardous waste post-closure permit renewal to address post closure care, maintenance and corrective action at the Luling Facility.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Tuesday, August 14, 2007.** Written comments will be considered prior to a final permit decision.

The draft permit, application and all related information is available at LDEQ, Headquarters in Baton Rouge and at the **Saint Charles Parish Library, Headquarters located at 105 Lakewood Drive, Luling, LA 70070.**

For any inquiries contact LDEQ Customer Service Center at (225) 219-LDEQ, that is (225) 219-5337.

All correspondence should specify AI Number 1096, Permit Number LAD0001700756-PC-RN-1, and Activity Number PER20040007.

The public notice with detailed information has been scheduled to publish in The Advocate and The Saint Charles Herald-Guide on June 28, 2007 and can be viewed on the LDEQ Permits Public Notice Web page.

Scheduled Broadcast: Thursday, June 28, 2007



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

CERTIFIED MAIL 7003 2260 0005 9323 3731

Mr. George A. McGowan
Monsanto Company
12501 M South River Road
Luling, LA 70070

RE: Monsanto Company
AI 1096/ PER20040007
LAD 001700756
Draft Hazardous Waste Post-Closure Renewal Permit for EMA Basin, No. 1 Well Pond, and
AN Ponds 4&5

Dear Mr. McGowan:

Attached, is your copy of the Monsanto Company, Draft Hazardous Waste Post-Closure Permit, LAD 001700756-PC-RN-1, which incorporates language pertaining to the post-closure care and maintenance activities for EMA Basin, No. 1 Well Pond and AN Ponds 4&5, Luling Facility.

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft renewal hazardous waste operating permit. By request and if the Department finds a significant degree of public interest, a public hearing will also be scheduled at least forty-five (45) days after the date on which the public notice is given. The date, time and location of the public hearing, if requested, and specific dates for the beginning and ending of the comment period are contained in the attached public notice.

Prior to taking a final action on the final renewal permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permit decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number 1096, EPA Identification Number LAD 001700756, and Permit Activity Number PER20040007 on all future correspondence pertaining to this issue. Should you have any questions concerning this matter, please contact Mr. Will F. Steele of the Waste Services Section at (225) 219-3134.

Sincerely,

Bijan Sharafkhani, P.E.
Administrator
Waste Permits Division

wfs

Attachment

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY FACILITY

The undersigned verifies that the Monsanto Company, Luling Facility has received a copy of the draft hazardous waste post-closure permit renewal and public notice regarding:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

MONSANTO COMPANY, LULING FACILITY

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

June 22, 2007

Telephone (985) 764-2366

Ms. Mary desBordes, Director
St. Charles Parish Library, Headquarters
105 Lakewood Drive
Luling, LA 70070-0949

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) N0 1096, LAD0001700756-PC-RN-1, PER20040007

Dear Ms. desBordes:

We request that the enclosed copy of the hazardous waste permit application renewal, related information and public notice for the referenced facility be made available for public review upon receipt. It is imperative that all of the information is available for review at all times; therefore, the material cannot be checked out by anyone at any time.

The material should be retained during the permitting process. At the close of the permitting period, the Louisiana Department of Environmental Quality, Office of Environmental Services (LDEQ-OES), Permits Division, will provide written notice to you requesting that the information be removed.

Please complete the attached 'Verification by Library' and mail to Ms. Laura Ambeau, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax to (225) 219-3309.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Ambeau at (225) 219-3277.

Sincerely,

Laura Ambeau
Environmental Scientist, Public Participation Group

LA/Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY LIBRARY

The undersigned verifies that the Saint Charles Parish Library, Headquarters has received a hazardous waste permit renewal application and related information associated with the following public notice:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

SAINT CHARLES PARISH LIBRARY, HEADQUARTERS:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

June 22, 2007

Phone (985) 783-5000

Albert Laque
Parish President, Saint Charles Parish
15045 Hwy. 18
Hahnville, LA 70057

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE
PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

Dear Mr. Laque:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the draft hazardous waste operating permit and legal notice that is scheduled to be published in The Advocate and The Saint Charles Herald-Guide on June 28, 2007.

Should you have any questions regarding the facility, additional permit information may be obtained from Mr. Will F. Steele, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3134.

Sincerely,

Laura M. Ambeau
Environmental Scientist, Public Participation Group

LA

Enclosures/2

VERIFICATION BY PARISH GOVERNMENT

The undersigned verifies that the Parish President, Saint Charles Parish has received a copy of the draft hazardous waste operating permit renewal regarding:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) N0 1096, LAD0001700756-PC-RN-1, PER20040007

Saint Charles Parish Government:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
PHONE (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

June 22, 2007

Mr. Kishor Fruitwala
U. S. EPA, Region VI
1445 Ross Avenue, Suite 1200
Mail Code: 6PDA
Dallas, Texas 75202-2733

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

Dear Mr. Fruitwala:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the draft hazardous waste post-closure permit renewal and legal notice that is scheduled to be published in The Advocate and The Saint Charles Herald-Guide on June 28, 2007.

Should you have any questions regarding the facility, additional permit information may be obtained from Mr. Will F. Steele, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3134.

Sincerely,

Laura Ambeau
Environmental Scientist, Public Participation Group

LA
Enclosures

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY EPA

The undersigned verifies that the EPA Region VI Office has received a copy of the draft hazardous waste post-closure permit renewal and public notice regarding:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

EPA Region VI:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

June 22, 2007

Phone: (504) 736-7701

fax: (504) 736-7702

Mr. Blaise Guzzardo
Southeast Regional Office
201 Evans Road, Bldg. 4, Suite 420
New Orleans, La. 70123-5230

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

Dear Mr. Guzzardo:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the draft hazardous waste operating permit renewal and legal notice that is scheduled to be published in The Advocate and The Saint Charles Herald-Guide on June 28, 2007.

Should you have any questions regarding the facility, additional permit information may be obtained from Mr. Will F. Steele, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3134.

Sincerely,

Laura Ambeau
Environmental Scientist, Public Participation Group

LA
Enclosures

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY REGIONAL OFFICE

The undersigned verifies that the Southeast Regional Office has received a copy of the draft hazardous waste operating permit renewal and public notice regarding:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL
MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

Southeast Regional Office:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

VERIFICATION BY FIRST FLOOR SCANNING CENTER

THIS INFORMATION MUST BE AVAILABLE FOR PUBLIC VIEWING
AT 8:00AM on
Thursday, June 28, 2007

The undersigned verifies that a copy of the Draft Hazardous Waste Post-Closure Permit Renewal along with all related information and public notice for the referenced facility has been received by the First Floor Scanning Center:

Re: REQUEST FOR PUBLIC COMMENT ON A DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT
RENEWAL

MONSANTO COMPANY, LULING FACILITY
LULING, SAINT CHARLES PARISH, LOUISIANA
AGENCY INTEREST (AI) NO 1096, LAD0001700756-PC-RN-1, PER20040007

FIRST FLOOR SCANNING CENTER:

By: _____ Date: _____

.....

The Public Participation Group contact for this packet of information is
Laura Ambeau, Rm. 321-31, 2-3277

SIGNATURE PAGE

DRAFT PERMIT**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY****HAZARDOUS WASTE POST-CLOSURE PERMIT****PERMITTEE:** MONSANTO COMPANY**PERMIT NUMBER:** LAD001700756-PC-RN-1
Agency Interest # 1096/ Activity # 20040007**FACILITY LOCATION:** 12501 M SOUTH RIVER ROAD
LULING, LOUISIANA, 70070

This permit is issued by the Louisiana Department of Environmental Quality (LDEQ) under the authority of the Louisiana Hazardous Waste Control Law R.S. 20:2171 et seq., and the regulations adopted thereunder and under the authority of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) to Monsanto Company, (hereafter called the Permittee), to operate a hazardous waste Treatment, Storage and Disposal (TSD) facility located at Luling, Louisiana, at latitude 29° 55' 015" and longitude 90° 21' 020."

For the purposes of this permit, the "Administrative Authority" shall be the Secretary of the Louisiana Department of Environmental Quality, or his/her designee.

The permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein and the applicable regulations as specified in the permit. Applicable regulations are those which are in effect on the effective date of issuance of this permit.

This permit is based on the assumption that the information provided to LDEQ by the Permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of the HSWA of 1984, which modify Section 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit.

Section 212 provides authority to review and modify the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modification, revocation, and reissuance of this permit (see LAC 33:V.323) and potential enforcement action. The Permittee must inform the LDEQ of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit shall be effective as of _____, and shall remain in effect until _____, unless revoked, reissued, modified or terminated in accordance with LAC 33:V.323 and 705 of the Louisiana Hazardous Waste Regulations. The Administrative Authority may issue any permit for a duration that is less than the maximum term of ten (10) years and the term shall not be extended beyond the maximum duration by modification in accordance with LAC 33:V.315.

Provisions of this permit may be appealed in writing pursuant to LA. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. A request for hearing must be sent to the following:

Louisiana Department of Environmental Quality
Office of the Secretary
Attention: Hearings Clerk, Legal Services Division
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

Chuck Carr Brown, Ph.D., Assistant Secretary
Louisiana Department of Environmental Quality

Date

PART A

APPLICATION

EPA ID NO: | L | A | D | | 0 | 0 | 1 | | 7 | 0 | 0 | | 7 | 5 | 6 |

OMB #: 2050-0034 Expires 11/30/2005

United States Environmental Protection Agency

HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See Instructions on page 23)	First Name: Peter	MI: W	Last Name: Chan
	Phone Number: (985) 785-3572		Phone Number Extension:
2. Facility Permit Contact Mailing Address (See Instructions on page 23)	Street or P.O. Box: P.O. Box 174		
	City, Town, or Village: Luling		
	State: Louisiana		
	Country: United States		Zip Code: 70070
3. Operator Mailing Address and Telephone Number (See Instructions on page 23)	Street or P.O. Box: same		
	City, Town, or Village:		
	State:		
	Country:	Zip Code:	Phone Number
4. Legal Owner Mailing Address and Telephone Number (See Instructions on page 23)	Street or P.O. Box: same		
	City, Town, or Village:		
	State:		
	Country:	Zip Code:	Phone Number
5. Facility Existence Date (See Instructions on page 24)	Facility Existence Date (mm/dd/yyyy): 10/01/1954		
6. Other Environmental Permits (See Instructions on page 24)			
A. Permit Type (Enter code)	B. Permit Number		C. Description
	see next page		
7. Nature of Business (Provide a brief description; see Instructions on page 24)			
Monsanto Company at Luling, Louisiana manufactures agricultural and industrial organic speciality chemicals such as herbicides and bleaching compounds.			

6. Other Environmental Permit (See instruction on page 36)

A. Permit Type (Enter Code)		B. Permit Number												C. Description	
N		L	A	0	0	0	5	2	6	6				LPDES Permit	
U		9	7	2	3	0	3							Disposal Well No. 3	
U		9	7	2	6	0	4							Disposal Well No. 4	
U		9	7	2	7	6	8							Disposal Well No. 5	
U		9	7	2	9	5	2							Disposal Well No. 6	
P		P	S	D	-	L	A	-	6	2	3			PSD Permit	
R		L	A	D	0	0	1	7	0	0	7	5	6	Post-Closure permit PC-1-MO-1	
R		L	A	D	0	0	1	7	0	0	7	5	6	Post-Closure permit PC-2-MO-1	
E		2	5	1	7	-	V	5						Part 70 Permit for Glyphosate Unit	
E		2	5	3	3	-	V	3						Part 70 Permit for ACL/CYA Unit	
E		2	5	5	7	-	V	0						Part 70 Permit for DSIDA Unit	
E		2	5	6	7	-	V	2						Part 70 Permit for Steam Plant and Supporting Units	
E		2	5	7	4	-	V	3						Part 70 Permit for GI Units	
E		2	5	9	6	-	V	1						Part 70 Permit for PCI3	
E		2	8	3	0	-	V	0						Part 70 Permit for General Permit	
E		P	-	0	2	2	5							Solid Waste Permit for NPDES Basins	
E		P	-	0	2	2	6							Solid Waste Permit for Deepwell No. 2 Pond	
E		P	-	0	2	8	0							Solid Waste Permit for Spill Basins	
E		P	-	0	3	5	0							Solid Waste Beneficial-Use Permit for Biosolids	

EPA ID NO: 1 L A D 1 0 1 0 1 1 7 1 0 1 0 1 7 1 5 1 6 1

OMB #: 2050-0034 Expires 11/30/2005

Process Codes and Design Capacities (See Instructions on page 24) - Enter information in the Sections on Form Page 3.

A. PROCESS CODE - Enter the code from the list of process codes in the table below that best describes each process to be used at the facility. Fifteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), enter the process information in Item 9 (including a description).

B. PROCESS DESIGN CAPACITY - For each code entered in Section A, enter the capacity of the process.

- 1. AMOUNT** - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
- 2. UNIT OF MEASURE** - For each amount entered in Section B(1), enter the code in Section B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
D79	<u>Disposal:</u> Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	<u>Treatment (continued):</u> Cement Kiln	For T81-T93:
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure in Code Table Below	T86	Blast Furnace	
S01	<u>Storage:</u> Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T87	Smelting, Melting, or Refining Furnace	Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S03	Waste Pile	Cubic Yards or Cubic Meters	T89	Methane Reforming Furnace	
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T90	Pulping Liquor Recovery Furnace	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T91	Combustion Device Used in The Recovery Of Sulfur Values From Spent Sulfuric Acid	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T92	Halogen Acid Furnaces	
S99	Other Storage	Any Unit of Measure in Code Table Below	T93	Other Industrial Furnaces Listed in 40 CFR §260.10	
T01	<u>Treatment:</u> Tank Treatment	Gallons Per Day; Liters Per Day	T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	X01	<u>Miscellaneous (Subpart X):</u> Open Burning/Open Detonation	Any Unit of Measure in Code Table Below
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
			X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons.....	G	Short Tons Per Hour.....	D	Cubic Yards.....	Y
Gallons Per Hour.....	E	Metric Tons Per Hour.....	W	Cubic Meters.....	C
Gallons Per Day.....	U	Short Tons Per Day.....	N	Acres.....	B
Liters.....	L	Metric Tons Per Day.....	S	Acre-feet.....	A
Per Hour.....	H	Pounds Per Hour.....	J	Hectares.....	Q
Per Day.....	V	Kilograms Per Hour.....	R	Hectare-meter.....	P
		Million Btu Per Hour.....	X	Btu Per Hour.....	I

EPA ID NO: | L | A | D | 0 | 0 | 1 | 7 | 0 | 0 | 7 | 5 | 6 |

OMB #: 2050-0034 Expires 11/30/2005

Description of Hazardous Wastes (See instructions on page 25) - Enter information in the Sections on Form Page 5.

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in Section A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Section A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** - For each quantity entered in Section B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the listed hazardous wastes.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

- Enter the first two as described above.
 - Enter "000" in the extreme right box of Item 10.D(1).
 - Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.
- 2. PROCESS DESCRIPTION:** If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in Section A. On the same line complete Sections B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In Section A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Section D(2) on that line enter "included with above" and make no other entries on that line.
- Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 10 (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES											
				(1) PROCESS CODES (Enter code)										(2) PROCESS DESCRIPTION- (If a code is not entered in D(1))	
X 1	K 0 5 4	900	P	T	0	3	D	8	0						
X 2	D 0 0 2	400	P	T	0	3	D	8	0						
X 3	D 0 0 1	100	P	T	0	3	D	8	0						
4	D 0 0 2													Included With Above	

EPA ID NO: L A D 0 0 1 7 0 0 7 5 6

OMB# 2050-0034 Expires 11/30/2005

Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5 a, etc)															
Line Number	A. EPA Hazardous Waste No (Enter code)					B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES							
	(1) PROCESS CODE (Enter code))								(2) PROCESS DESCRIPTION (If a code is not entered in D(1))						
1	F	0	3	9	0.7	T	S	0	1						
2	D	0	0	1											Included with above
3	D	0	1	8											Included with above
4	D	0	2	1											Included with above
5	D	0	2	7											Included with above
6	D	0	2	8											Included with above
7	D	0	3	9											Included with above
8	D	0	4	0											Included with above
9	D	0	0	2	4.7	T	S	0	2						
10	D	0	0	4											Included with above
11	D	0	0	7											Included with above
12	D	0	0	9	1.7	T	S	0	1						
13	D	0	0	8	3.2	T	S	0	1						
14	F	0	0	3	1.6	T	S	0	1						
15	D	0	0	1											Included with above
16	D	0	0	2											Included with above
17	D	0	2	8	3.5	T	S	0	1						
18	D	0	0	6	0.05	T	S	0	1						
19	D	0	0	2											Included with above
20	D	0	0	8											Included with above
21	F	0	0	3	7	T	S	0	1						
22	F	0	0	5											Included with above
23	D	0	0	1											Included with above
24	D	0	0	1	21	T	S	0	1						
25	U	1	2	2	58	T	S	0	1						
26	D	0	0	2	0.5	T	S	0	1						
27	D	0	0	7											Included with above
28	D	0	0	9											Included with above
29	D	0	1	1											Included with above
30															
31															
32															
33															
34															
35															
36															
37															
38															
39															

OMB#: 2050-0024 Expires 10/31/2007

SEND COMPLETED FORM TO: The Appropriate State or EPA Regional Office.	United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM		
1. Reason for Submittal (See Instructions on page 9) MARK ALL BOX(ES) THAT APPLY	Reason for Submittal: <input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities) <input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information) <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application <input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____) <input checked="" type="checkbox"/> As a component of the Hazardous Waste Report		
2. Site EPA ID Number (page 10)	EPA ID Number LA D 0 0 1 7 0 0 7 5 6		
3. Site Name (page 10)	Name: Monsanto Company		
4. Site Location Information (page 10)	Street Address: 12501 M South River Road		
	City, Town, or Village: Luling	State: LA	
	County Name: St. Charles	Zip Code: 70070	
5. Site Land Type (page 10)	Site Land Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
6. North American Industry Classification System (NAICS) Code(s) for the Site (page 10)	A. 32532	B.	
	C.	D.	
7. Site Mailing Address (page 11)	Street or P. O. Box: P.O. Box 174		
	City, Town, or Village: Luling		
	State: LA		
	Country: U.S.A.	Zip Code: 70070	
8. Site Contact Person (page 11)	First Name: Allen	MI: R	Last Name: Dent
	Phone Number: (985) 785-3578 Extension: 3578		E-mail address: allen.r.dent@monsanto.com
9. Operator and Legal Owner of the Site (pages 11 and 12)	A. Name of Site's Operator: Monsanto Company		Date Became Operator (mm/dd/yyyy): 09/01/2000
	Operator Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
	B. Name of Site's Legal Owner: Monsanto Company		Date Became Owner (mm/dd/yyyy): 09/01/2000
	Owner Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		

EPA ID NO: IL1A1010171010756

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9. Legal Owner (Continued) Address	Street or P. O. Box: 800 North Lindbergh Boulevard City, Town, or Village: St. Louis State: MO Country: U.S.A.		Zip Code: 63167																								
10. Type of Regulated Waste Activity Mark "Yes" or "No" for all activities; complete any additional boxes as instructed. (See instructions on pages 13 to 16.)																											
A. Hazardous Waste Activities Complete all parts for 1 through 6.																											
<input checked="" type="checkbox"/> <input type="checkbox"/> 1. Generator of Hazardous Waste If "Yes", choose only one of the following - a, b, or c.		<input type="checkbox"/> <input checked="" type="checkbox"/> 2. Transporter of Hazardous Waste																									
<input checked="" type="checkbox"/> a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.) of non-acute hazardous waste; or <input type="checkbox"/> b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.) of non-acute hazardous waste; or <input type="checkbox"/> c. CESQG: Less than 100 kg/mo (220 lbs./mo.) of non-acute hazardous waste		<input checked="" type="checkbox"/> 3. Treater, Storer, or Disposer of Hazardous Waste (at your site) Note: A hazardous waste permit is required for this activity. <input type="checkbox"/> <input checked="" type="checkbox"/> 4. Recycler of Hazardous Waste (at your site)																									
In addition, indicate other generator activities. <input type="checkbox"/> <input checked="" type="checkbox"/> d. United States Importer of Hazardous Waste <input type="checkbox"/> <input checked="" type="checkbox"/> e. Mixed Waste (hazardous and radioactive) Generator		<input type="checkbox"/> <input checked="" type="checkbox"/> 5. Exempt Boiler and/or Industrial Furnace If "Yes", mark each that applies. <input type="checkbox"/> a. Small Quantity On-site Burner Exemption <input type="checkbox"/> b. Smelting, Melting, and Refining Furnace Exemption																									
		<input type="checkbox"/> <input checked="" type="checkbox"/> 6. Underground Injection Control																									
B. Universal Waste Activities		C. Used Oil Activities Mark all boxes that apply.																									
<input type="checkbox"/> <input checked="" type="checkbox"/> 1. Large Quantity Handler of Universal Waste (accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste generated and/or accumulated at your site. If "Yes", mark all boxes that apply:		<input type="checkbox"/> <input checked="" type="checkbox"/> 1. Used Oil Transporter If "Yes", mark each that applies. <input type="checkbox"/> a. Transporter <input type="checkbox"/> b. Transfer Facility																									
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center; border-bottom: 1px solid black;">Generate</th> <th style="width: 20%; text-align: center; border-bottom: 1px solid black;">Accumulate</th> </tr> </thead> <tbody> <tr> <td>a. Batteries</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>b. Pesticides</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>c. Thermostats</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>d. Lamps</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>e. Other (specify) _____</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>f. Other (specify) _____</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>g. Other (specify) _____</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>			Generate	Accumulate	a. Batteries	<input type="checkbox"/>	<input type="checkbox"/>	b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>	c. Thermostats	<input type="checkbox"/>	<input type="checkbox"/>	d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>	e. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	f. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	g. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> 2. Used Oil Processor and/or Re-refiner If "Yes", mark each that applies. <input type="checkbox"/> a. Processor <input type="checkbox"/> b. Re-refiner	
	Generate	Accumulate																									
a. Batteries	<input type="checkbox"/>	<input type="checkbox"/>																									
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>																									
c. Thermostats	<input type="checkbox"/>	<input type="checkbox"/>																									
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f. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>																									
g. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>																									
		<input type="checkbox"/> <input checked="" type="checkbox"/> 3. Off-Specification Used Oil Burner																									
<input type="checkbox"/> <input checked="" type="checkbox"/> 2. Destination Facility for Universal Waste Note: A hazardous waste permit may be required for this activity.		<input type="checkbox"/> <input checked="" type="checkbox"/> 4. Used Oil Fuel Marketer If "Yes", mark each that applies. <input type="checkbox"/> a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner <input type="checkbox"/> b. Marketer Who First Claims the Used Oil Meets the Specifications																									

EPA ID NO: LAD 001 700 756

Continued from – 11.A., Waste Codes

U122, U147, U154, U161, U170, U188, U210, U220.

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BODY OF PERMIT

DRAFT**HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT**

**Monsanto Company
No. 1 Well Pond, EMA Basin and AN Ponds 4&5
EPA ID# LAD 001 700 756
Luling, Louisiana
St. Charles Parish**

**Agency Interest # 1096 / PER20040007
Permit Number LAD 001 700 756 PC-RN-1**

I. PERMIT PREAMBLE

This permit is issued to Monsanto Company hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. seq., and the regulations adopted thereunder.

GLOSSARY OF TERMS

For the purpose of this permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

"Administrative Authority" means the Secretary of the Louisiana Department of Environmental Quality or his/her designee.

"Application" refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a permit.

"Area of Concern" (AOC) means any discernable unit or area which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly-identified SWMU.

If the AOC is shown not to be a SWMU by the investigation, the Administrative Authority may determine that no further action is necessary and notify the Permittee in writing.

“Area of Investigation” (AOI) is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).

“Beneficial Resource” describes natural resources that are useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific ground water or surface water sources, as a “Special Beneficial Resource,” or “Designated Beneficial Resource.” The beneficial resources then may be entitled to greater protection from contamination.

“Constituents of Concern” (COC) means the COPC’s that pose a significant risk.

“Constituents of Potential Concern” (COPC) means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPC’s for each release site based on existing sampling data, waste analysis reports, etc.

“Conceptual Site Model” (CSM) is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

“CWA” means Clean Water Act.

“Corrective Action” is an activity conducted to protect human health and the environment.

“DNAPL” a dense liquid not dissolved in water, commonly referred to as “free product.”

“Department” means the Louisiana Department of Environmental Quality (LDEQ).

“EPA” means the United States Environmental Protection Agency.

“HSWA” means the 1984 Hazardous and Solid Waste Amendments to RCRA.

“Hazardous Constituent” means any constituent identified in LAC 33:V.Chapter 31. Table 1, or any constituent identified in LAC 33:V.3325. Table 4.

“LDEQ” means the Louisiana Department of Environmental Quality.

“LNAPL” a light liquid not dissolved in water, commonly referred to as “free product.”

“Operating Record” means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this permit, document noncompliance with this permit, or document actions taken to remedy noncompliance with this permit. A minimum list of documents that must be included in the operating record are identified at LAC 33:V.1529.B.

“Permittee” means Monsanto Company, 12501 M South River Road, Luling, Louisiana 70070.

“RCRA Permit” means the full permit, with RCRA and HSWA portions.

“RFA” means RCRA Facility Assessment.

“RFI” means RCRA Facility Investigation.

“Release” means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

“SARA” means Superfund Amendments and Reauthorization Action of 1986.

“Solid Waste Management Unit” (SWMU) means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

“Stabilization” is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to this permit.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as permit requirements until permit modification procedures as specified in Condition II.C. of the permit and LAC 33:V.321 are completed.

II. GENERAL PERMIT CONDITIONS

II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to conduct post-closure care and corrective action activities associated with the No. 1 Well Pond, EMA Basin and AN Ponds 4&5 in accordance with the conditions of this permit. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, or under Section 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulation, or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

II.D. SEVERABILITY

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

II.E. DUTIES AND REQUIREMENTS

II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit (LAC 33:V.701), constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

II.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate

quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit.

II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

II.E.8.a. enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;

II.E.8.b. have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;

II.E.8.c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and

II.E.8.d. sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

II.E.9. Sample Monitoring and Records

II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or other method as approved by the Administrative Authority.

II.E.9.b. Records of monitoring information shall include:

- II.E.9.b.(1)** the date, exact place, and time of sampling or measurements;
- II.E.9.b.(2)** the name(s) and signature(s) of the individual(s) who performed the sampling or measurements;
- II.E.9.b.(3)** the date(s) analyses were performed;
- II.E.9.b.(4)** the name(s) and signature(s) of the individual(s) who performed the analyses;
- II.E.9.b.(5)** the analytical techniques or methods used;
- II.E.9.b.(6)** the results of such analyses; and
- II.E.9.b.(7)** associated quality assurance performance data.

II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual and semi-annual reports, indicating that:

II.E.9.c.(1) any commercial laboratory providing analytical results and test data to the LDEQ required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the LDEQ.

LAC 33:I. Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website: <http://www.deq.state.la.us/laboratory/index.htm>.

In accordance with LAC 33:I.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the LDEQ;
- required to be included in a monitoring report submitted to the LDEQ;
- required to be submitted by contract; or
- otherwise required by the LDEQ regulations.

This includes, but is not limited to data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

II.E.9.c.(2) If the Permittee decides to use their own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document and submit for approval, quality assurance/quality control procedures that are commensurate with requirements in LAC 33:I.Subpart 3. Laboratory Accreditation.

II.E.9.c.(3) For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval (See Table 4, footnote 2.). Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

II.E.10. Retention of Records

The Permittee shall maintain records from all ground water monitoring wells and associated groundwater surface elevations for the active life of the facility and for the post-closure care period.

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C.

File copies shall be kept for LDEQ inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

II.E.12. Physical Facility after Modification

For a closed unit being modified, the Permittee may not manage hazardous waste in the modified portion of the closed unit until:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.

II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date (LAC 33:V.309.L.6).

II.E.16. Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3915, in the event of an unauthorized discharge that results in an emergency condition (an emergency condition is any condition which could be reasonably expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property), the Permittee shall notify the DPS (Department of Public Safety) 24-hour Louisiana Emergency Hazardous Materials Hotline by telephone at (225) 925-6595 immediately, but in no case later than one (1) hour after learning of the discharge. The DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will subsequently notify the Department regarding the details of the discharge.

II.E.17. Non-Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E and/or results in contamination of the groundwaters of the state but does not result in an emergency condition, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.18. Unauthorized Discharge to Groundwater Notification

In accordance with LAC 33:I.3919, in the event of an unauthorized discharge resulting in contamination of groundwaters of the state by moving in, into, within or on any saturated subsurface strata, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.19. Written Notification Reports for Unauthorized Discharges

The Permittee shall submit written reports to the SPOC for any unauthorized discharges requiring notification under Conditions II.E.16, II.E.17 or II.E.18 of this permit. The written report shall be submitted in accordance with the procedure and content requirements specified in LAC 33:I.3925.

II.E.20. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit not reported under Condition II.E.16 or Condition II.E.17 of this permit that may endanger the human health or the environment. This report shall include at minimum the following information:

II.E.20.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

II.E.20.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

II.E.20.b.(1) name, address, and telephone number of the owner or operator;

II.E.20.b.(2) name, address, and telephone number of the facility;

II.E.20.b.(3) date, time, and type of incident;

II.E.20.b.(4) name and quantity of materials involved;

II.E.20.b.(5) the extent of injuries, if any;

II.E.20.b.(6) an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

II.E.20.b.(7) estimated quantity and disposition of recovered material that resulted from the incident.

II.E.21. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment not reported under Condition II.E.19 of this permit. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

II.E.22. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.20 of this permit.

II.E.23. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

II.E.24. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

II.E.25. Schedule of Compliance

The Permittee shall submit for review and approval by the Administrative Authority, the following items:

II.E.25.a. Within ninety (90) days of the effective date of this permit, the Permittee shall submit a permit modification as a Class 1¹ modification in accordance with LAC 33:V.321.C.1 to revise the Groundwater Sampling and Analysis Plan submitted to the Administrative Authority on December 27, 2006. The Groundwater Sampling and Analysis Plan listed in Attachment 1 shall be revised to include the following:

II.E.25.a.(1) the addition of the permanent piezometers, RFI-P1, RFI-P2, RFI-P3, and RFI-P4 to Tables 1, 4 and 5 and Drawing 4, the labeling of RFI-D on Drawing 7, and the addition of the footnote labeled as (14) in Table 1,

II.E.25.a.(2) the removal of all references to plugged and abandoned wells in any drawings or maps,

II.E.25.a.(3) all current and past wells of the groundwater monitoring system (with clear references for wells that have been plugged and abandoned) should be included in all well lists and tables,

II.E.25.a.(4) the exact location of the proposed well to monitor the background concentrations in Layer II clearly marked on all drawings, text and tables,

II.E.25.a.(5) language stating that field blanks should be collected at a frequency of one per day according to RECAP,

II.E.25.a.(6) the second sentence of the second full paragraph on page 16 of the December 27, 2006, version of the Groundwater Sampling and Analysis Plan is an incomplete sentence and should include the phrase "the total depth of the well shall be measured to the nearest 0.01 foot and recorded in the...".

II.E.25.a.(7) replace the term "compliance monitoring" with the term "corrective action monitoring" (see Condition VI.1) in Sections 3.1, 3.1.1.1 and 3.1.2.1 of the Groundwater Sampling and Analysis Plan.

II.E.25.b. Within ninety (90) days of the effective date of this permit, the Permittee shall submit a permit modification to revise the Post-Closure Care Plan. The Post-Closure Care Plan in Attachment 1 shall be revised to include the following:

II.E.25.b.(1) the EMA Basin: the following wells were listed as monitoring for natural attenuation parameters and should be revised to be consistent with the Groundwater Sampling and Analysis Plan (Attachment 1), EW-1 and EW-12 monitor Parameter Set F; EW-3, EW-4 and EW-5 are piezometers,

II.E.25.b.(2) the AN 4&5 Ponds: the following wells were listed as monitoring for natural attenuation parameter and should be revised to be consistent with the Groundwater Sampling and Analysis Plan (Attachment 1), AE-1, AE-2, AN-3, AN-5 monitor Parameter Set A; AN-4 is a piezometer,

II.E.25.b.(3) label RFI-D in Drawing 5.

II.E.26. Additional Operating Standards

(RESERVED)

II.E.27. Updated Documents to Be Submitted Prior to Operation

(RESERVED)

II.E.28. Documents to Be Maintained at Facility Site

II.E.28.a. Until post-closure is completed and certified by an independent registered professional engineer, the Permittee shall maintain at the facility the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.

II.E.28.a.(1) (Reserved) A waste analysis plan is not required for the unit in post-closure under this permit.

II.E.28.a.(2) (Reserved) A personnel training plan is not required for the unit in post-closure under this permit.

II.E.28.a.(3) (Reserved) A contingency plan is not required for the unit in post-closure under this permit. Contingencies for post-closure care and maintenance activities are addressed in the post-closure care plan.

II.E.28.a.(4) (Reserved) Arrangements with local authorities are not required for the unit in post-closure under this permit.

II.E.28.a.(5) Post-Closure Plan in accordance with LAC 33:V.3523. (see Attachment 1).

II.E.28.a.(6) Updated cost estimate for facility post-closure care in accordance with LAC 33:V.3709 (see Attachment 1).

II.E.28.a.(7) Operating records as required by LAC 33:V.1529.

II.E.28.a.(8) Inspection Plan developed in accordance with LAC 33:V.517.G and 1509.B. (see Attachment 1)

II.E.28.a.(9) Security plan developed in accordance with LAC 33:V.1507. (see Attachment 1)

II.E.28.b. All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

II.E.29. Annual Report

An annual report shall be submitted covering all hazardous waste units and their activities during the previous calendar year as required by LAC 33:V.1529.D.

II.E.30. Manifest

The Permittee shall report manifest discrepancies and unmanifested waste as required by LAC 33:V.309.L.8 and 9.

II.E.31. Emissions

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

II.E.32. Waste Discharges

Waste discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

II.E.33. Non-Listed Hazardous Waste Facilities

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Closed Facilities). If the Permittee determines that an unpermitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E.23 of the General Permit Conditions.

II.E.34. Compliance With Land Disposal Restrictions

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Conditions VII and VIII).

II.E.35. Establishing Permit Conditions

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

II.E.36. Obligation for Corrective Action

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII of this permit. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

II.E.37. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

III. GENERAL POST-CLOSURE CONDITIONS

III.A. DESIGN AND OPERATION OF THE POST-CLOSURE UNITS

III.A.1. The Permittee must maintain all facilities to minimize the possibility of a fire, explosion, or any unauthorized sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or water that could threaten human health or the environment.

III.A.2. The Permittee must not manage any new wastes.

III.B. REQUIRED NOTICE

(RESERVED)

III.C. GENERAL WASTE ANALYSIS

(RESERVED)

III.D. SECURITY

The Permittee must comply with the security provisions of LAC 33:V.1507, as referenced in Attachment 1.

III.E. GENERAL INSPECTION REQUIREMENTS

The Permittee must follow the inspection requirements referenced in Condition II.E.28.a.(8) and Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509.A and B, and 3523.B.

III.F. PERSONNEL TRAINING

(RESERVED)

III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes.

III.H. LOCATION STANDARDS

III.H.1. The Permittee has furnished evidence that it is in compliance with seismic standards as required by LAC 33:V.517.T.

III.H.2. The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC 33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by LDEQ prior to any hazardous waste and/or hazardous waste units being placed thereon.

III.I. PRECIPITATION RUN-ON AND RUN-OFF

The Permittee must provide for the control by diversion or treatment of run-on and run-off resulting from a rainfall of at least twelve (12) inches, occurring during a period of twenty-four (24) hours in conformity with locally available records of a twenty-four (24) hour rainfall as per LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.2911.

III.J. HURRICANE EVENTS

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

III.K. PREPAREDNESS AND PREVENTION

III.K.1. Required Equipment

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

III.K.2. Testing and Maintenance of Equipment

The Permittee must test and maintain the equipment specified in Condition III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

III.K.3. Access to Communications or Alarm Systems

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.1 and 1511.E.2.

III.K.4. Arrangements with Local Authorities

The Permittee shall document in the annual report that the requirements of LAC 33:V.1511.G have been met. This documentation shall include those state and local agencies involved and those facilities and operations covered.

Documentation of written arrangements with state and local agencies shall also be included in this report. Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal in the operating record.

III.L. CONTINGENCY PLAN

(RESERVED)

III.M. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 9 and 11.

III.N. RECORD KEEPING AND REPORTING

III.N.1. Operating Record

(RESERVED)

III.N.2. Annual Report

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

III.O. POST-CLOSURE

III.O.1. Post-Closure Care

The Permittee must manage the No. 1 Well Pond and the EMA Basin in accordance with this permit, LAC 33:V. Chapter 35, Subchapter B and 2911.

III.O.2. Amendment to Post-Closure Permit

The Permittee must request modification to this post-closure permit when necessary, in accordance with LAC 33:V.3523.D.and LAC 33:V.321.

III.O.3. Post-Closure Maintenance

After final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period specified in LAC 33:V.3521.A.1. The Permittee must maintain all units in post-closure according to the requirements in Condition V.B.

III.O.4. Post-Closure Restrictions

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure care period when access by the public or domestic livestock may pose a hazard to human health.

III.O.5. Post-Closure Property or Site Use

III.O.5.a. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority finds that the disturbance:

III.O.5.a.(1) is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

III.O.5.a.(2) is necessary to reduce a threat to human health or the environment.

III.O.5.b. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

III.O.6. Post-Closure Contact

The Permittee must provide the name, address, and phone number of the person or office to contact about the permitted post-closure units during the post-closure care period.

III.O.7. Certification of Completion of Post-Closure Care

No later than sixty (60) days after completion of the established post-closure care period for the specified unit, the Permittee must submit to the Administrative Authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit(s) was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent registered professional engineer. Within sixty (60) days after receipt of the certification, the Administrative Authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Administrative Authority has reason to believe that post-closure care was not conducted in accordance with the approved post-closure plan.

The certification of post-closure care shall include the certification statement found in the LAC 33:V.513.A or the current certification statement in the Louisiana hazardous waste regulations at the time of completion of post-closure care.

III.P. COST ESTIMATE FOR CARE OF THE POST-CLOSURE UNIT

III.P.1. The Permittee must maintain a cost estimate for the permitted and associated structures as required by LAC 33:V.3709.

III.P.2. The Permittee must maintain and adjust the post-closure cost estimate for inflation, as specified in LAC 33:V.3709.B, C, D, and for other circumstances that increase the cost of post-closure.

III.P.3. The Permittee must base all post-closure cost estimates on the assumption that a third party contractor performs post-closure monitoring and maintenance in accordance with LAC 33:V.3709.A.

III.P.4. The Permittee must consider the inventory and process conditions and their impact on the post-closure cost estimate for any resubmittal.

III.P.5. During the life of the facility, the Permittee must keep, at the facility, its latest post-closure cost estimates, as necessary, to comply with LAC 33:V.3709.D.

III.P.6. Throughout the active life of the facility, the Permittee must adjust and revise its post-closure cost estimates, as necessary, to comply with the provisions of LAC 33:V.3709.

III.Q. FINANCIAL ASSURANCE FOR THE POST-CLOSURE UNIT

Throughout the post-closure care period, the Permittee must provide updates for its financial assurance mechanisms, as necessary, to comply with the provisions of LAC 33:V.3711.

III.R. LIABILITY REQUIREMENTS

(RESERVED)

III.S. INCAPACITY OF THE PERMITTEE

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

III.T. POST-CLOSURE NOTICES

If the Permittee or any subsequent Permittee of the land upon which this hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in LAC 33:V, Chapters 3 and 7. The Permittee must

demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC 33:V, Subpart 1. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Administrative Authority approve either:

III.T.1. the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

III.T.2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

IV. PERMITTED CLOSED UNITS

This permit is applicable to the units known as the No. 1 Well Pond and the EMA Basin located on the property of Monsanto Company, St. Charles Parish, Louisiana. This permit also applies to any appurtenances associated with these units. The appurtenances are defined as any run-on/run-off control systems, leachate collection/leak detection systems, tanks, and/or piping and instrumentation associated with these regulated units. If any additional appurtenances are added in the future, they would be addressed through a permit modification as required by regulation and this permit.

**TABLE 1
INVENTORY AT CLOSURE***

UNIT NAME	UNIT TYPE	SURFACE AREA
No. 1 Well Pond	Surface Impoundment	12,550 square feet
EMA Basin	Surface Impoundment	25,000 square feet

* See HSWA Permit Condition VIII. for reference to the AN Ponds 4&5.

V. PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNITS

V.A. POST-CLOSURE CARE PERIOD

The post-closure care period will be in effect for the period of thirty (30) years, unless extended or shortened by the Administrative Authority, as specified in LAC 33:V.3521.A.1 and 2, Length of Post-Closure.

V.A.1. No. 1 Well Pond: On February 27, 1996, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

V.A.2. EMA Basin: On September 16, 1997, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

V.B. POST-CLOSURE MAINTENANCE

After final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527 and Condition III.O of this permit, including maintenance and monitoring throughout the post-closure care period specified in the permit under Condition V.A and LAC 33:V.3521.A.1. The owner or operator must:

V.B.1. for all permitted units, maintain the integrity and effectiveness of the final cover, including making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events;

V.B.2. for all permitted units, maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V, Chapter 33;

V.B.3. for all permitted units, manage a run-on and run-off control system to prevent erosion and other damage to the final cover;

V.B.4. for all permitted units, maintain the cover with a final cover designed, constructed and maintained to:

V.B.4.a. provide long-term minimization of migration of liquids through the surface impoundments,

V.B.4.b. function with minimal maintenance at all permitted units,

V.B.4.c. promote drainage and minimize erosion or abrasion of the final cover at all permitted units,

V.B.4.d. accommodate settling and subsidence, as necessary, so that the cover's integrity is maintained for all permitted units, and

V.B.4.e. have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present at the surface impoundments.

V.B.5. The annual report shall include a Post-Closure activity report for the No. 1 Well Pond and EMA Basin.

V.C. POST-CLOSURE RESTRICTIONS

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure period when access by the public or domestic livestock may pose a hazard to human health.

V.D. POST-CLOSURE USE OF PROPERTY

V.D.1. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority find that the disturbance:

V.D.1.a. is necessary to the proposed use of the property and will not increase the potential hazard to human health or the environment; or

V.D.1.b. is necessary to reduce a threat to human health or the environment.

V.D.2. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

VI. GROUNDWATER PROTECTION

VI.A. APPLICABILITY

The regulations of LAC 33:V, Chapters 3, 5, 15, 29, 33, 35, and 37, and Louisiana Hazardous Waste Control Law, Revised Statute R.S., 30:2171 of the Environmental Quality Act, R.S., 30:2001 et seq., and the provisions of this condition shall apply to groundwater protection programs at the units identified in Condition IV, Table 1 of this permit. All requirements of this condition must be satisfied and shall apply until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7 of this permit. This includes compliance, closure, and post closure care periods. The units referenced in Condition IV, Table 1 of the permit are subject to post-closure groundwater monitoring. If groundwater contamination is confirmed as a result of operations related to past or present hazardous waste management facilities associated with this site, the Permittee shall establish, expand or continue, assessment and corrective action programs in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

VI.B. REQUIRED PROGRAMS

The Permittee must continue to conduct a corrective action program per Condition VI.J using all existing systems necessary to comply with monitoring programs specified herein and as stated in the most current approved Sampling and Analysis Plan. Corrective actions must continue uninterrupted to the fullest extent until groundwater problems are abated per the requirements of LAC 33:V.3321 and this requirement is terminated through permit modifications in accordance with LAC 33:V.321 and 322, as applicable.

All wells and any associated piezometers described in Table 2 of this permit must be inspected, maintained, protected from moving equipment, and cannot be abandoned unless exempted from the program at a later date by the Administrative Authority, or unless the integrity of the well or piezometer is threatened. In such a case, it must be replaced with a new well, in conformance with a work plan approved by the Administrative Authority. (see Condition VI.K – Construction and Abandonment of Monitoring Wells and Geotechnical Boreholes) The Permittee must include in the Annual and Semi-annual Reports and all groundwater monitoring and corrective action reports, revised facility maps, which will show all its monitoring, assessment, compliance, and corrective action wells.

VI.C. GROUNDWATER PROTECTION STANDARD

VI.C.1. The Permittee must comply with conditions specified in this permit that are designed to ensure that hazardous waste and hazardous waste constituents do not exceed the concentration limits (see Condition VI.D) in the uppermost permeable zones underlying the waste management areas, beyond or below the points of compliance (see Condition VI.E) during the compliance period (see Condition VI.F). The protection standard does not exempt the Permittee from required corrective action regarding contamination detected by wells not assigned as groundwater compliance points.

VI.C.2. The Permittee must utilize and maintain the present groundwater monitoring system described in this permit.

VI.C.3. The Permittee must adhere to the Sampling and Analysis Plan referenced in Attachment 1.

VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents and concentration limits to which the protection standards of LAC 33:V.3305 apply are shown herein in Tables 2 through 4. The sampling frequency for the constituents is noted in Table 2.

The Permittee must continue existing corrective action or institute corrective action in all areas associated with the permitted post-closure units and appurtenances where groundwater has been affected by hazardous wastes, hazardous constituents, or parameters exceeding the assigned concentration limits, and implement corrective measures in other areas which may be discovered to exceed these limits in the future.

Table 2
Monitoring Well Network

Well Name	Associated Unit	Well Type ⁴	Zone Screened	Sampling Frequency and Parameter Sets ^{1,2}
EO-1	EMA Basin	R	II	E ³
EO-3	EMA Basin	R	II	E ³
EO-4	EMA Basin	R	II	E
EO-5	EMA Basin	Plume Defining	II	F,Q
EW-1	EMA Basin	Plume Defining	II	F
EW-2	EMA Basin	Plume Defining	II	F,Q
EW-3	EMA Basin	Piezometer	II	N/A
EW-4	EMA Basin	Piezometer	IV	N/A
EW-5	EMA Basin	Piezometer	IV	N/A
EW-6	EMA Basin	POC	IV	F,Q
EW-7R	EMA Basin	R/POC	II	E ³
EW-9R	EMA Basin	R/POC	II	E ³
EW-10	EMA Basin	Plume Defining	IV	F,Q
EW-11	EMA Basin	Plume Defining	II	F,Q
EW-12	EMA Basin	Plume Defining	II	F
EW-13	EMA Basin	POC	VI	F,Q
EW-14	EMA Basin	Plume Defining	II	F,Q

Well Name	Associated Unit	Well Type ⁴	Zone Screened	Sampling Frequency and Parameter Sets ^{1,2}
EW-33RP	EMA Basin	Plume Defining	IV	F,Q
EW-66	EMA Basin	Plume Defining	IV	F,Q
ER-1	EMA Basin	R/POC	II	E ³
ER-2	EMA Basin	R/POC	II	E ³
ER-3	EMA Basin	R/POC	II	E ³
ER-4	EMA Basin	R/POC	II	E ³
MW-A ⁵	EMA Basin/No. 1 Well Pond	Up Gradient Well	IV	F,I,Q
MW-B ⁵	No. 1 Well Pond	Plume Defining	IV	I,Q
MW-C ⁵	No. 1 Well Pond	Plume Defining	IV	I,Q
TW-1	No. 1 Well Pond	Plume Defining	II	I,Q
TW-2	No. 1 Well Pond	R/POC	II	E ³
TW-3	No. 1 Well Pond	Plume Defining	II	I,Q
TW-4	No. 1 Well Pond	POC	II	I,Q
TW-5	No. 1 Well Pond	POC	II	I,Q
TW-6R	No. 1 Well Pond	Plume Defining	II	I,Q
TW-7	No. 1 Well Pond	Plume Defining	II	I,Q
TW-8	No. 1 Well Pond	Plume Defining	IV	I,Q
TW-9R	No. 1 Well Pond	POC	IV	I,Q
TW-11	No. 1 Well Pond	Plume Defining	II	I,Q
TW-12	No. 1 Well Pond	Plume Defining	IV	I,Q
WP-1	No. 1 Well Pond	R/POC	II	E ³
RW-3	No. 1 Well Pond	R/POC	II	E ³

(1) Table 3 lists the analytes associated with each parameter set.

(2) Sampling is performed semiannually during the 2nd and 4th quarters.

(3) Biennially (in the 4th quarter), one free-phase sample must be collected from a selected well and analyzed for Parameter Set F or I, depending on the area monitored.

(4) Wells designated as R/POC are recovery (R) wells until designated by the administrative authority in writing as point-of-compliance (POC) wells after verification that free-phase is no longer present.

(5) These monitor wells are also part of the Solid Waste Groundwater Monitoring Program.

Table 3
Parameter Set for Groundwater Monitoring
Field Parameters (All Wells – All
Programs)¹

	Water Level Measurements
	Total Depth Measurements
	pH
	Specific Conductivity
	Temperature
	Turbidity
Parameter Set E (EMA Basin and No. 1 Well Pond)	
	Dense Non-aqueous Phase Liquid (DNAPL) In-Well Measurement
Parameter Set F (EMA Basin Area)	
VOCs	1,1,2-Trichloro-1,2,2-trifluoroethane
	EDC
	Tetrachloroethene
	Trichloroethylene
	Vinyl chloride
	TICs (Tentatively Identified Compounds)
SVOCs	1,2-Dichlorobenzene
	Benzoic acid
	Benzyl alcohol
	bis(2-Ethylhexyl)phthalate
	o-cresol (2-Methylphenol)
	Phenol
	TICs
Parameter Set I (No. 1 Well Pond)	
VOCs	1,1,2-Trichloroethane
	EDC
	Acetone
	Benzene
	Carbon disulfide
	Chloroform
	Methylene chloride
	Vinyl chloride
SVOCs	1,2-Dichlorobenzene
	PCA (para-Chloroaniline)
	PNP (para-Nitrophenol)
	Benzoic acid
	Benzyl alcohol

		Cyclohexanol
		Diallate
		Phenol
		Triallate
		TCAA (Trichloroallyl alcohol)
	Total Metals	Manganese
		Sodium
	Conventional Chemistry	Ammonia
	Site Specific	CYA (Cyanuric Acid)
		Formaldehyde
Parameter Set Q (Monitored Natural Attenuation Parameters for the EMA Basin and the No. 1 Well Pond)		
	Metals	Total Iron
		Dissolved Iron
	Conventional Chemistry	Alkalinity
		Sulfate
		Chloride
		Nitrate
		Sulfide
		TOC (Total Organic Carbon)
	Dissolved Gases	Oxygen
		Carbon Dioxide
		Carbon Monoxide
		Methane
		Ethane
		Ethene
	Additional Field Parameters	Dissolved Oxygen
		REDOX (Reduction/Oxidation Potential)
¹ Only depth to water measurements will be collected from piezometers.		

Table 4
Groundwater Monitoring Parameters

Parameter	Container Type	Preservation Method	Analytical Method ⁽²⁾	Concentration Limit ⁽³⁾
Specific Conductivity ⁽¹⁾	Plastic or glass if shipped to lab	None	9050	N/A
pH ⁽¹⁾	Plastic or glass if shipped to lab	Field Measure	9040	N/A
Dense Non-aqueous Phase Liquid Measurement	N/A	N/A	N/A	N/A
REDOX	N/A	N/A	Direct Measure	N/A
Temperature	N/A	N/A	170.1	N/A
Turbidity	N/A	N/A	180.1	N/A
Water Level Measurements	N/A	N/A	N/A	N/A
Dissolved Oxygen (field parameter)	N/A	N/A	Direct Measure	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	3 x 40mL glass vials	Cool to 4°C	8260	5
1,1,2-Trichloroethane	3 x 40mL glass vials	HCl and Cool to 4°C	8260	5
1,2-Dichloroethane	3 x 40mL glass vials	HCl and Cool to 4°C	8260	5
Acetone	3 x 40mL glass vials	Cool to 4°C	8260	25
Benzene	3 x 40mL glass vials	Cool to 4°C	8260	5
Carbon disulfide	3 x 40mL glass vials	Cool to 4°C	8260	5
Chloroform	3 x 40mL glass vials	Cool to 4°C	8260	5
Methylene chloride	3 x 40mL glass vials	Cool to 4°C	8260	5
Tetrachloroethene	3 x 40mL glass vials	Cool to 4°C	8260	5
TICs-VOA	3 x 40mL glass vials	Cool to 4°C	8260	N/A
Trichloroethylene	3 x 40mL glass vials	Cool to 4°C	8260	5
Vinyl chloride	3 x 40mL glass vials	Cool to 4°C	8260	10
1,2-Dichlorobenzene	2 x 1 L amber glass	Cool to 4°C	8270	10
Benzoic acid	2 x 1 L amber glass	Cool to 4°C	8270	50
Benzyl alcohol	2 x 1 L amber glass	Cool to 4°C	8270	10
bis(2-Ethylhexyl)phthalate	2 x 1 L amber glass	Cool to 4°C	8270	10
Diallate	2 x 1 L amber glass	Cool to 4°C	8270	10
Phenol	2 x 1 L amber glass	Cool to 4°C	8270	10

Parameter	Container Type	Preservation Method	Analytical Method ⁽²⁾	Concentration Limit ⁽³⁾
Cyclohexanol	2 x 1 L amber glass	Cool to 4°C	8270	10
o-Cresol	2 x 1 L amber glass	Cool to 4°C	8270	10
para-Chloroaniline (PCA) or 4-Chloroaniline	2 x 1 L amber glass	Cool to 4°C	8270	50
Para-nitrophenol (PNP) or 4-nitrophenol	2 x 1 L amber glass	Cool to 4°C	8270	50
Trichloroallyl alcohol (TCAA)	2 x 1 L amber glass	Cool to 4°C	8270	10
TICs-SVOA (Tentatively Identified Compounds-semivolatile organic analysis)	2 x 1 L amber glass	Cool to 4°C	8270	N/A
Triallate	2 x 1 L amber glass	Cool to 4°C	8270	10
Iron (total and dissolved)	250mL plastic	HNO ₃ , pH<2	6010	50
Manganese (total)	250mL plastic	HNO ₃ , pH<2	6010	10
Sodium (total)	250mL plastic	HNO ₃ , pH<2	6010	5,000
Alkalinity	250 mL plastic	Cool to 4°C	310.1	100
Ammonia (as N)	250 mL plastic	Cool to 4°C, H ₂ SO ₄ , pH<2	350.1	100
Chlorides	125 mL plastic	Cool to 4°C	925.1	1,000
Nitrate (as N)	250 mL plastic	Cool to 4°C	353.2	100
Nitrite (as N)	250 mL plastic	Cool to 4°C	354.1	100
Sulfate	125 mL plastic	Cool to 4°C	9038	5,000
Sulfide	8oz plastic	Cool to 4°C, ZnOAc	376.1/9030 /9034	1,000
TOC (Total Organic Carbon)	2 x 40 mL amber glass vials	H ₂ SO ₄ pH<2	9060	1,000
Cyanuric Acid (CYA)	125mL plastic	Cool to 4°C	Monsanto SOP	4,000
Formaldehyde	125mL amber glass	Cool to 4°C	8315	50
Carbon Dioxide	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride	RSK 175/ AM20GA X	110 / 5000
Carbon Monoxide	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride	RSK 175/ AM20GA X	50 / 1000
Ethane	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride or Trisodium phosphate	RSK 175/ AM20GA X	1260 / 0.025
Ethene	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride or Trisodium phosphate	RSK 175/ AM20GA X	760 / 0.025

Parameter	Container Type	Preservation Method	Analytical Method ⁽²⁾	Concentration Limit ⁽³⁾
Methane	3 x 40mL glass vials ³	Cool to 4°C / Benzalkonium chloride or Trisodium phosphate	RSK 175/ AM20GA X	20 / 0.1
Oxygen	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride	RSK 175/ AM20GA X	110 / 500

- (1) As per Permit Condition VI.G.9, pH and specific conductance will be measured as standard indicator parameters of groundwater contamination which will be used to indicate well integrity and possible groundwater contamination.
- (2) Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition (EPA Publication Number SW-846, 1986 as amended): must be in accordance with the latest edition of SW-846. EPA has not published methods applicable for CYA determinations. Therefore, the Monsanto Method is used by the contract laboratory.
- (3) Unless otherwise denoted by footnotes 4 and 5, these concentration limits are based on the Practical Quantitation Limit (PQL) in ug/L. The Permittee must report to the Administrative Authority, any detectable level of compounds on Table 2, even if lower than the PQL. PQL denotes the lowest analyte concentration in a given matrix (groundwater) that the Administrative Authority believes a competent lab can be expected to achieve consistently. Samples must be analyzed using an SW-846 method that meets the listed detection limit.

V.I.E. POINT OF COMPLIANCE

The point of compliance (POC) at which the groundwater protection standard of LAC 33:V.3305.A applies, and at which monitoring must be conducted, are the vertical intervals intercepted by the wells identified in Table 2 and required by Condition VI.C.2. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells listed as point of compliance wells in Table 2 unless amended through permit modifications by the Administrative Authority in the future. The vertical limit of compliance must be the uppermost aquifer.

When contamination is detected in the uppermost permeable zone underlying the waste management area, the next vertical aquifer or permeable zone must also be monitored. Since hazardous constituents have been detected at the point of compliance above the groundwater protection standard, the Permittee has instituted a corrective action program. During the corrective action program (i.e., until such time as hazardous constituents are no longer detected above the groundwater protection standard at the point of compliance and beyond), the groundwater quality at each monitoring well (including point of compliance wells, plume defining wells and recovery wells) identified in Table 2 must be monitored in order to determine the effectiveness of the corrective action. Additional monitoring wells may be installed, as required.

VI.F. COMPLIANCE PERIOD

The compliance period during which the groundwater protection standard of LAC 33:V.3305.A applies shall continue until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7. of this permit. However, if a corrective action program has been implemented, the compliance period can not end until after the Permittee has demonstrated that the corrective action has been effectively implemented and the groundwater protection standard of LAC 33:V.3305.A has not been exceeded for a period of three (3) consecutive years.

VI.G. GENERAL REQUIREMENTS

VI.G.1. The Permittee's groundwater monitoring system for the previously identified hazardous waste management facilities must consist of all wells as listed in Table 2, unless changed in the future by the Administrative Authority through permit modification.

VI.G.2. The Permittee must maintain the structural and mechanical integrity of all wells and provide protection from accidental damage and surface infiltration, as well as implement a monitoring well inspection schedule. A written report on damage to any well must be submitted to the Administrative Authority in accordance with Condition II.E.21 of this permit.

VI.G.3. Upgradient wells must always yield groundwater samples from the uppermost water bearing zone that are representative of groundwater that has not been affected by possible leakage from the waste management units. Downgradient and vertical point of compliance wells must yield groundwater samples from the water bearing zones that represent the quality of groundwater beneath the facilities that flows to the points of compliance.

VI.G.4. The Permittee must conform to the sampling and analysis requirements listed in Conditions VI.C and the most recently approved sampling and analysis plan, and as required by LAC 33:V.3315.

VI.G.5. Each well must be measured for total depth and depth to water on the same day and prior to purging. Measurements must be to the nearest 0.1 foot, and the values must be recorded in the field notebook and reproduced and submitted in the Groundwater Annual and semi-annual Reports. If 10% of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event.

VI.G.6. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The wells must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Micro-purging may be performed as outlined in the approved sampling and analysis plan (Attachment 1). Other techniques must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. Purging methods must be consistent throughout the life of the permitted closed unit.

VI.G.7. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically alter or influence the sample. Sampling devices other than those listed in the approved sampling and analysis plans (Attachment 1) must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the life of the permitted closed unit.

VI.G.8. Groundwater samples shall be monitored and analyzed for turbidity. Samples containing less than five (5) NTU (nephelometric turbidity unit) are acceptable for analysis when the analytical method is sensitive to turbidity (such as the analysis of metals). Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified geologist as "the best obtainable". An evaluation of turbidity must accompany all potentially affected analytical values.

VI.G.9. The Permittee must measure pH and specific conductance as standard indicators of groundwater contamination, which will be used to indicate well integrity and possible groundwater contamination. The results of these analyses must be recorded in the field log book and interpreted.

VI.G.10. A chain of custody protocol must be employed that will allow for tracking possession and handling of samples from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the test parameters required.

VI.G.11. Sample preservation, handling and analysis must meet the specifications of LAC 33:V.3315.D and E and Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd. Edition (EPA Publication Number SW-846, as amended) or an equivalent substitute (approved by the Administrative Authority prior to implementation). Containers, preservation methods and analytical limits are listed in Table 3 and Table 4 of this permit.

VI.G.12. The Permittee must use one of the statistical procedures outlined in the most current approved facility ground water sampling and analysis plan or LAC 33:V.3315.H in determining whether background values or concentrations have been exceeded for the hazardous constituents specified in Tables 3 and 4.

VI.G.13. Records of all sampling and analytical work must be maintained at the site during the life of the facilities, including post-closure care periods. An up-to-date field log book (or compilation of field sheets) must be kept at the site which documents (for each sample) the well identification number, total well depth, elevation of top of casing, water level, water color (visual), well evacuation procedures and equipment, sample withdrawal procedures and equipment, date, time sample identification numbers, field measurements (pH, specific conductance, etc.) and methods, name of collector, field observations, calculations of the standing water volume in the well, and the total volume evacuated.

VI.H. DETECTION MONITORING PROGRAM

(RESERVED) Permittee is currently in the Corrective Action Program as per Condition VI.J, the conditions of this section do not currently apply to the Permittee.

VI.H.1. Any downgradient wells that become contaminated, but eventually produce groundwater samples with analytical results below the permitted concentration limits for monitored constituents for at least three (3) years as the result of a corrective action program, may be re-scheduled for detection monitoring on a schedule approved by the Administrative Authority.

VI.H.2. The Permittee must utilize the existing groundwater detection monitoring system as required by LAC 33:V.3315 to obtain samples that provide a reliable indication of the presence of hazardous wastes or constituents in groundwater when compared to background values approved by the Administrative Authority.

VI.H.3. Detection systems shall be sampled according to the schedule specified in the Sampling and Analysis Plan. Within ninety (90) days after completing the analytical work and subsequent review of analyses and computations, the Permittee shall compile and submit the Semi-Annual Groundwater Monitoring Report to the Office of Environmental Services, Waste Permits Division. The Semi-Annual Groundwater Monitoring Report must contain the test results, the statistical comparative data (as applicable), groundwater potentiometric maps, graphs, copies of the field log book notes and chain of custody where appropriate, and a list of the parameters that were statistically significant for the sampling event. This information shall be maintained at the site as provided in Condition VI.G.7, except that statistically significant parameter measurements must be forwarded for review by the Administrative Authority in accordance with Condition VI.H.5.

VI.H.4. The monitoring system outlined in Condition VI.C.2 must be utilized for groundwater sampling.

VI.H.5. If the Permittee determines that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified

pursuant to LAC 33:V.3317.A at any monitoring well at the compliance point, the Permittee must do the following:

VI.H.5.a. Notify the Administrative Authority of this finding in writing within seven (7) days. This notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.

VI.H.5.b. Immediately sample the groundwater in all monitoring wells for confirmation and determine whether constituents listed in LAC 33:V.3325, Table 4 are present, and if so, in what concentration.

VI.H.5.c. For any LAC 33:V.3325, Table 4 compounds found in the analysis pursuant to Condition VI.H.5.b above, the Permittee may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the Permittee does not resample for the compounds found pursuant to Condition VI.H.5.b above, the hazardous constituents found during this initial analysis will form the basis for compliance monitoring. If contamination is not confirmed, the Permittee shall continue monitoring according to the schedule specified in the Sampling and Analysis Plan referenced in Attachment 1. The Permittee must address confirmed groundwater contamination problems at the direction of the Administrative Authority, regardless of the source of the contamination.

VI.H.6. The Permittee must submit an application for a permit modification to the Administrative Authority within ninety (90) days from the date of the confirmation of contamination. The application must include:

VI.H.6.a. An identification of the concentration of any LAC 33:V.3325, Table 4 constituent detected in the groundwater at each monitoring well at the compliance point;

VI.H.6.b. Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of LAC 33:V.3319;

VI.H.6.c. Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of LAC 33:V.3319; and

VI.H.6.d. For each hazardous constituent detected (as defined in LAC 33:V.3301.A.1) at the compliance point, a proposed concentration limit under LAC 33:V.3309.

VI.H.7. If the Permittee determines that there is a statistically significant difference for analytical parameters of hazardous constituents, which are specified pursuant to the groundwater protection standard, listed in approved Sampling and Analysis Plan or Condition VI.D at any monitoring well at the compliance point, the Permittee may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Paragraph in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified in LAC 33:V.3317.G.4 unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph the Permittee must:

VI.H.7.a. Notify the Administrative Authority in writing within seven days of determining statistically significant evidence of contamination at the compliance point that he or she intends to make a demonstration under this Paragraph;

VI.H.7.b. Within ninety (90) days, submit a report to the Administrative Authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

VI.H.7.c. Within ninety (90) days, submit to the Administrative Authority an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and

VI.H.7.d. Continue to monitor in accordance with the detection monitoring program established under this permit.

VI.H.8. If the Permittee determines that the detection monitoring program no longer satisfies the requirements of this permit, the Permittee, within ninety (90) days, shall submit an application for a permit modification to make any appropriate changes to the program.

VI.I. COMPLIANCE MONITORING

(RESERVED) Permittee is currently in the Corrective Action Program as per Condition VI.J, the conditions of this section do not currently apply to the Permittee. Subsequent to the Detection Monitoring Program (Condition VI.H), the Permittee must conduct a Compliance Monitoring Program in accordance with LAC 33:V.3319, whenever hazardous waste constituents are confirmed in any monitoring well of the Detection Monitoring Program.

VI.I.1. The Permittee must determine the concentration of each hazardous constituent listed in the approved Sampling and Analysis Plan at least quarterly during compliance monitoring periods (from groundwater in the wells required by Condition VI.C.2). At least annually the Permittee must analyze samples from all monitoring wells at the compliance points for all constituents listed in LAC 33:V.3325, Table 4, to determine whether additional hazardous constituents are present in the Uppermost Aquifer (and, if so, at what concentration), pursuant to procedures of this permit. If the Permittee finds LAC 33:V.3325, Table 4 constituents in the groundwater that are not already identified in the permit as monitoring constituents, the Permittee may re-sample within one month and repeat LAC 33:V.3325, Table 4 analysis. If the second analysis confirms the presence of new constituents, the Permittee must report the concentrations of these additional constituents to the Administrative Authority within seven (7) days after the completion of the second analysis and add them to the monitoring list. If the Permittee chooses not to re-sample, then he or she must report the concentrations of these additional constituents to the Administrative Authority within seven (7) days after completion of the initial analysis and add them to the monitoring list.

VI.I.2. If the Permittee determines, pursuant to LAC 33:V.3319.D, 3321.C, and Condition VI.C that any concentration limits under LAC 33:V.3309 are being exceeded at any monitoring well at the point of compliance, he must:

VI.I.2.a. notify the Administrative Authority of this finding in writing within seven (7) days. The notification must indicate which concentration limits have been exceeded and list the contaminants and concentrations; and

VI.I.2.b. submit, to the Administrative Authority, an application for a permit modification to establish or modify corrective action programs meeting the requirements of LAC 33:V.3321 within 180 days, or within ninety (90) days if a certified engineering feasibility study has been previously submitted to the Administrative Authority under LAC 33:V.3317.G.5.b. The application must include the following information:

VI.I.2.b.i. a detailed description and schedule for assessment and corrective actions that will achieve

compliance with the groundwater protection standard specified in Condition I.D of this permit under LAC 33:V.3319.A; and

VI.I.2.b.ii. a geotechnical plan (certified by a qualified geologist or a geotechnical engineer) to demonstrate the effectiveness of the planned corrective actions. This plan may incorporate the compliance monitoring program developed to meet the requirements of this permit, except that the Permittee will be required to monitor as frequently as necessary (as required in Condition VI.J.1) to assure that sufficient data will be generated for demonstrating the effectiveness of the corrective actions.

VI.I.2.c. If the Permittee determines, pursuant to LAC 33:V.3319.D, that the groundwater concentration limits under Condition VI.D are being exceeded at any monitoring well at the point of compliance, he or she may demonstrate that a source other than a regulated unit caused the contamination, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation, or natural variation in the groundwater. In making a demonstration under this Condition, the Permittee, must:

VI.I.2.c.i. notify the Administrative Authority in writing within seven (7) days that he or she intends to make a demonstration under this condition;

VI.I.2.c.ii. within ninety (90) days, submit a report to the Administrative Authority which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from an error in sampling, analysis or evaluation;

VI.I.2.c.iii. within ninety (90) days, submit to the Administrative Authority an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and

VI.I.2.c.iv. continue to monitor in accordance with the compliance monitoring program established under this Permit.

VI.I.2.d. If the Permittee determines that the compliance monitoring program no longer satisfies the requirements of this permit, he or she must, within ninety (90) days submit an

application for a permit modification to make any appropriate changes to the program.

VI.J. CORRECTIVE ACTION PROGRAM

The Permittee currently has a Corrective Action Program for groundwater contamination as a result of operations related to past or present hazardous waste management facilities identified in Condition VI.A of this permit. The Permittee must continue or expand the Corrective Action Program in accordance with the requirements of LAC 33:V.3321 and as subsequently directed by the Administrative Authority. Water quality sampling, water level measurements and the general compilation of data to demonstrate the effectiveness of existing and new corrective action programs must be made until compliance with groundwater protection standards is achieved for at least three (3) years or until this requirement is terminated in writing by the Administrative Authority (after the data indicates adequate control of contaminant migration and concentration increases).

VI.J.1. The Permittee must evaluate and report the effectiveness and progress of the corrective action semi-annually to the Administrative Authority as required by LAC 33:V.3321.G. and in accordance with Condition VI.L.1.j. The evaluation shall include the following:

VI.J.1.a. general discussion on the effectiveness of the corrective action in controlling the source of release and protecting human health and the environment, and progress being made toward completion;

VI.J.1.b. trend analysis and updated schedule for completion of the corrective action;

VI.J.1.c. evaluation of performance reliability, ease of implementation and any encountered concerns or problems;

VI.J.1.d. any changes to surrounding land use or environmental receptors that may impact effectiveness;

VI.J.1.e. recommendations for improvement;

VI.J.1.f. recovered amounts for each component of a recovery system (e.g., recovery wells, French drain systems, etc.) and the entire system; recovered amounts for both contaminants and all liquids; recovered amounts for both the reporting period and since recovery implementation; and

VI.J.1.g. graphical and statistical analyses, as necessary, to demonstrate the effectiveness and progress (the Administrative Authority may also require predictive computer modeling, as per LAC 33:V.3303.D.).

VI.J.2. Plume defining wells are wells present or proposed for installation along the perimeter of the plume and serve the purpose of insuring detection of any enlargement of the plume.

VI.J.2.a. The plume defining wells as listed in Table 2 must be sampled according to a frequency approved by the Administrative Authority, as part of the on-going evaluation of the corrective action program, for constituents specified in Table 4 of this permit to satisfy LAC 33:V.3315.A.3.

VI.J.2.b. If the Permittee determines that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents at any plume defining wells previously reported as non-detect, the Permittee must notify the Administrative Authority of the finding in writing within seven (7) days. This notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination. Furthermore, the Permittee must do one of the following:

VI.J.2.b.(1) Submit an application for a permit modification to the Administrative Authority within ninety (90) from the date of the confirmation of contamination. The application must include a plan to perform an additional assessment to identify the full extent of the plume and propose any changes necessary to the corrective action to achieve the groundwater protection standard. The application shall include any proposed changes to the groundwater monitoring system, monitoring frequency, sampling and analysis procedures and methods, and/or statistical methods; or

VI.J.2.b.(2) Demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Paragraph in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph the Permittee must:

VI.J.2.b.(2).a. Specify the Permittee's intention to make a demonstration under this Paragraph when notifying the Administrative Authority of the statistically significant evidence of contamination;

VI.J.2.b.(2).b. Within ninety (90) days, submit a report to the Administrative Authority that demonstrates that a source other than

a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation. Further, the Permittee must submit an application for a permit modification to make any appropriate changes to the monitoring program; and

VI.J.2.b.(2).c. Continue to monitor in accordance with the monitoring program established under this permit.

VI.J.3. If the Permittee determines that the corrective action program (including monitoring) no longer satisfies the requirements of this permit, the Permittee, within ninety (90) days, shall submit an application for a permit modification to make any appropriate changes to the program.

VI.K. CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The construction and abandonment of groundwater monitoring wells and piezometers must conform to the standards and guidelines specified in "**CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK**", ("Construction Handbook", May 1993 or the most recent version). This document is printed by and available from the Louisiana Department of Transportation and Development (DOTD), Water Resources Section, P.O. Box 94245, Baton Rouge, Louisiana 70804-9245.

A work plan for the construction of a new well must be submitted to the Administrative Authority for approval as the entire groundwater monitoring system must be approved. Any required new well should be installed within thirty (30) days of approval of the work plan by the Administrative Authority. Upon completion of new or replacement well, a copy of DOTD-GW-1 S, DOTD Well Registration Short Form, is to be provided to the Administrative Authority.

The Permittee must provide for the sealing of any vertical migration path resulting from exploratory boring, leachate collection or detection systems and/or groundwater monitoring programs as provided in LAC 33:V.3323. A work plan for the plugging and abandonment of a well must be submitted for approval by the Administrative Authority, whenever such migration pathways are discovered. Upon completion of well abandonment, a copy of DOTD-GW-2, DOTD Well Plugging and Abandonment Form, is to be provide to the Administrative Authority.

VI.L. REPORTING AND NOTIFICATION REQUIREMENTS

VI.L.1. Semi-Annual Groundwater Report

A groundwater report must be prepared for each sampling semi-annual event and submitted to the Administrative Authority within ninety (90) days of the sampling event. The report for the second semi-annual event will be submitted as part of the Annual Report. The report shall include the following:

VI.L.1.a. a table showing well number, well depth, interval screened, zone monitored, well diameter, screen and casing material (and the type of pump, if applicable) for all wells;

VI.L.1.b. a scaled facility map showing all wells (up-gradient, point of compliance, assessment, plume defining and recovery) and identifying monitored zones;

VI.L.1.c. a scaled potentiometric surface showing well locations, groundwater elevations with respect to mean sea level for each monitored zone;

VI.L.1.d. all analytical data, including QA/QC (data may be submitted in an electronic format);

VI.L.1.e. a tabular summary of all analytical data;

VI.L.1.f. a statistical method shall be used in evaluating data for each hazardous constituent, as approved by the Administrative Authority;

VI.L.1.g. graphical representation of the values of pH, conductance and the hazardous constituents including:

VI.J.1.g.(1) contaminant concentration isopleth maps for the indicator parameters as approved by the Administrative Authority;

VI.J.1.g.(2) contaminant concentration versus time graphs for the indicator parameters as approved by the Administrative Authority;

VI.L.1.h. a discussion of any significant changes in the data from the last reporting period;

VI.L.1.i. a discussion of the down time for any well or part of the system and actions taken to return the system to normal operations and maximum efficiency; and

VI.L.1.j. evaluation of the effectiveness and progress of any corrective action according to Condition VI.J.1.

VI.L.2. Annual Groundwater Report

An annual groundwater report must be submitted each year no later than March 1, as required by LAC 33:V.1529.D.8. This report must summarize all groundwater activities for the preceding calendar year including an evaluation of the monitoring strategy in relation to the direction of groundwater flow and locations of wells associated with the facilities. Applicable calculations must also include groundwater flow contaminant migration rates (as applicable), statistical comparisons, and any other information as it

regards corrective action required by this permit. This report will include the information from the second semi-annual sampling events specified in Permit Condition VI.L.1.

VI.L.3. Notification of Statistically Significant Evidence of Contamination

The Permittee must notify the Administrative Authority in accordance with Conditions VI.H, VI.I or VI.J when there is statistically significant evidence of contamination for chemical parameters or hazardous constituents.

VI.L.4. Notification of Release to SPOC

In the event of a release in, into, within, or on any groundwaters of the state, (i.e., any confirmation of contamination in any previously uncontaminated saturated subsurface strata) the Permittee must notify the Department within twenty-four (24) hours of confirming statistically significant evidence of a release. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with LAC 33:309.L.7 and Condition II.E.18 of this permit. This requirement is in addition to notification requirements to the Administrative Authority discussed in Conditions VI.H, VI.I or VI.J.

HAZARDOUS AND SOLID WASTE AMENDMENTS

VII. GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS

VII.A. STANDARD CONDITIONS

VII.A.1. Waste Minimization

Annually, by March 1, for the previous year ending December 31, the Permittee shall enter into the operating record as required by LAC 33:V.1529.B.19, a statement certified according to LAC 33:V.513.A specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage, or practicable disposal method that is currently available to the Permittee minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following criteria should be considered for the program:

VII.A.1.a. Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

VII.A.1.b. Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

VII.A.1.c. An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

VII.A.1.d. Factors that have prevented implementation of source reduction and/or recycling;

VII.A.1.e. Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

VII.A.1.f. An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;

VII.A.1.g. A flow chart or matrix detailing all hazardous wastes the facility produces by quantity, type, and building/area;

VII.A.1.h. A demonstration of the need to use those processes that produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste;

VII.A.1.i. A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed;

VII.A.1.j. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and

VII.A.1.k. The Permittee may meet the requirements for waste minimization by developing an Environmental Management System according to the EPA document, Integrated Environmental Management System Implementation Guide, EPA 744-R-00-011, October 2000, found on the EPA website at www.epa.gov/opptintr/dfe/pubs/iems/iems_guide/index.htm.

VII.A.2. Dust Suppression

Pursuant to LAC 33:V.4139.B.4, and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

VII.A.3. Failure to Disclose

The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts at any time may be cause for termination or modification of this Permit in accordance with LAC 33:323.B.2 and 3.

VII.A.4. Suspension, Modification, or Revocation and Reissuance, and Termination of Permit

This Permit may be modified, revoked and reissued, or terminated for cause as specified in LAC 33:V.323. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

VII.A.4.a. If the Administrative Authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C. or 323, a draft permit shall be prepared incorporating the proposed changes. The Administrative Authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application.

VII.A.4.b. The Permittee may initiate permit modification proceedings under LAC 33:V.321.C. All applicable requirements and procedures as specified in LAC 33:V.321.C shall be followed.

VII.A.4.c. Modifications of this Permit do not constitute a reissuance of the Permit.

VII.A.5. Permit Review

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in LAC 33:V.321.C. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

VII.A.6. Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

VII.A.6.a. Become effective by statute;

VII.A.6.b. Are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

VII.A.6.c. Are promulgated under LAC 33:V.Chapters 23, 25 and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, construction quality assurance (CQA) programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

VII.A.7. Specific Waste Ban

VII.A.7.a. The Permittee shall not place in any land disposal unit the wastes specified in LAC 33:V. Chapter 22 after the effective date of the prohibition unless the Administrative Authority has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

VII.A.7.b. The Permittee may store wastes restricted under LAC 33:V.Chapter 22 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of LAC 33:V.2205 including, but not limited to, clearly marking each tank or container.

VII.A.7.c. The Permittee is required to comply with all applicable requirements of LAC 33:V.2245 as amended. Changes to the Waste Analysis Plan will be considered permit modifications at the request of the Permittee, pursuant to LAC 33:V.321.C.

VII.A.7.d. The Permittee shall review the waste analysis plan and analyze the waste when a process changes to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record pursuant to Condition III.C.1 and 2.

VII.A.8. Information Submittal for the Corrective Action Strategy

Failure to comply with any condition of the Permit, including information submittals, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (LAC 33:V.323.B.3).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required by this Permit using the Corrective Action Strategy are signed and certified in accordance with LAC 33:V.Chapter 5, Subchapter B. All submittals required under the corrective action strategy must conform to those requirements outlined in the RECAP (see Condition VIII of this permit). Variance from content and/or formatting guidelines provided under the RECAP shall be requested by the Permittee prior to submittal to the Administrative Authority, as deemed necessary. Approval or disapproval of such a request with further guidance on content and formatting will be provided by the Administrative Authority, as deemed necessary. Five (5) copies each of these plans, reports, notifications or other submissions and one (1) electronic copy (3.5" IBM compatible disk or CD-ROM) of all portions thereof which are in word processing format shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

**Louisiana Department of Environmental Quality
Office of Environmental Services
Waste Permits Division
P.O. Box 4314
Baton Rouge, LA 70821-4314**

A summary of the planned reporting milestones pursuant to the corrective action requirements of this Permit is found in Condition VIII, Table 1.

VII.A.9. Data Retention

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

VII.A.10. Management of Wastes

All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a

release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. As a response to the Louisiana legislature mandate La. R.S. 30:2272 (Act 1092 of the 1995 Regular Session) to develop minimum remediation standards, the LDEQ promulgated the Risk Evaluation Corrective Action Program (RECAP). RECAP's tiered approach to risk evaluation and corrective action establishes not only across the board numerical standards for most media, but also allows for the development of more site-specific numerical standards, as warranted. The Permittee is required to comply with all applicable requirements of RECAP. Approval of units for managing wastes and conditions for operating the units shall be granted through the permitting process.

VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB-CC AIR REGULATIONS)

VII.B.1. PERFORMANCE STANDARDS FOR EQUIPMENT LEAKS

VII.B.1.a. Operating Requirements

The Permittee shall comply with the applicable requirements under LAC 33:V. Chapter 17 Subchapter B – Equipment Leaks – for all equipment associated with operations that treat, store, or dispose of hazardous waste with organic concentrations equal to or greater than 10 percent by weight.

VII.B.1.b. Monitoring Requirements

The Permittee shall monitor the following equipment for proper operation: pumps in light service, LAC 33:V.1719.A; compressors, LAC 33:V.1721; pressure relief devices in gas/vapor service, LAC 33:V.1723; open-ended valves or lines, LAC 33:1727; valves in gas/vapor service or in light liquid service, LAC 33:V.1737; and pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors, LAC 33:V.1731.

VII.B.1.c. Recordkeeping Requirements

The Permittee shall maintain an up-to-date list identifying each piece of equipment to which LAC 33:V. Chapter 17. Subchapter B applies, and record all information required by LAC 33:V.1743.

VII.B.1.d. Reporting Requirements

A semiannual report shall be submitted to the Administrative Authority in accordance with the requirements of LAC 33:V.1745, based on the date of submittal of the annual report for the facility. A report is not required for a 6-month period during which all pumps in light service, compressors, pressure relief devices in gas/vapor service, open-ended valves or lines, valves in gas/vapor service or in light liquid service, pumps and valves in heavy liquid service,

pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors are operated such that during no period of 24 hours or longer did the devices operate continuously in noncompliance with the applicable operating conditions defined in LAC 33:V.Chapter 17.Subchapter B.

VII.B.2. STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

The Permittee shall comply with the applicable requirements under LAC 33:V.1747 to 1767 for each permitted tank listed in Table VII.B.1. and for each container/container storage area listed in Table VII.B.2.

VII.B.2.a. Operating Requirements

VII.B.2.a.(1) The Permittee shall comply with the applicable requirements of LAC 33:V. Chapter 17, Subchapter C.

VII.B.2.a.(2) The Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans, schedules, information, and reports as contained in the Part II Permit Application.

VII.B.2.a.(3) The Permittee shall, upon request, identify all less than 90-day accumulation tanks or containers, which contain or contact hazardous wastes with organic concentrations equal to or greater than 10 percent by weight and identify the emission control system requirements under LAC 33:V.1703 to 1715.

VII.B.2.b. Monitoring Requirements

VII.B.2.b.(1) The pollution control methods used for tanks shall be inspected on a periodic basis.

VII.B.2.b.(2) Tanks meeting Level 1 controls shall be inspected at least once every year, LAC 33:V.1755.C.4.

VII.B.2.b.(3) Tanks meeting Level 2 controls shall be inspected in accordance with LAC 1755.E.3 for internal floating roofs, LAC 33:V.1755.F.3 for external floating roofs, LAC 33:V.1755.G.3 for air emission control equipment, and LAC 33:V.1755.I.4 for closed vent control systems.

VII.B.2.b.(4) The pollution control methods used for containers shall be inspected on a periodic basis.

VII.B.2.b.(5) Level 1 controls shall be inspected in accordance with LAC 33:V.1759.C.4.

VII.B.2.b.(6) Level 2 controls shall be inspected in accordance with LAC 33:V.1759.D.4.

VII.B.2.b.(7) Level 3 controls shall be inspected in accordance with LAC 33:V.1759.E.4.

VII.B.2.c. Recordkeeping Requirements

Air emission control design documentation shall be maintained in the facility operating record until the equipment is no longer in service. Records must be prepared and maintained for the various equipment and systems used at the facility.

VII.B.2.c.(1) Tanks using air emission control records must meet LAC 33:V.1765.B requirements.

VII.B.2.c.(2) Container storage areas using Level 3 controls must meet LAC 33:V.1765.D requirements.

VII.B.2.c.(3) Closed-vent system and control device systems meeting LAC 33:V.1761 must meet LAC 33:V.1765.E requirements.

VII.B.2.c.(4) Facilities exempted by LAC 33:V.1751.C must meet LAC 33:V.1765.F requirements.

VII.B.2.c.(5) Components identified as "unsafe to inspect and monitor" in accordance with LAC 33:V.1755.L and 1757.G must meet LAC 33:V.1765.G requirements.

VII.B.2.c.(6) Facilities that are governed by this Chapter and use alternate control systems meeting the emission control standards of 40 CFR 60, Subpart VV or 40 CFR 61, Subpart V must meet LAC 33:V.1765.H requirements.

VII.B.2.c.(7) All tanks or containers not using air emission controls in accordance with LAC 33:V.1747.D must meet LAC 33:V.1765.I requirements.

VII.B.2.d. Reporting Requirements

VII.B.2.d.(1) For each tank, surface impoundment, or container which manages hazardous waste that is exempted from using air emission controls, a written report shall be submitted to the Administrative Authority within fifteen (15) days of each occurrence when hazardous waste is placed in the waste management unit in noncompliance with the conditions of LAC 33:V.1751.C, as applicable. The written report shall contain the

EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent reoccurrence of the noncompliance.

VII.B.2.d.(2) For control devices used in accordance with the requirements of LAC 33:V.1735, a semiannual written report shall be submitted to the Administrative Authority, based on the date of submittal of the annual report, except as provided for in noncompliance situations. The report shall describe each occurrence during the previous six (6) month period when a control device is operated continuously for twenty-four (24) hours or longer in noncompliance with the applicable operating values defined in LAC 33:V.1713.C.4 or when a flare is operated with visible emissions as defined in LAC 33:V.1707.D. The written report shall include the EPA identification number, facility name and address, an explanation why the control device could not be returned to compliance within twenty-four (24) hours, and actions taken to correct the noncompliance.

VII.B.2.d.(3) The report to the Administrative Authority in accordance with the requirements of VII.B.2.d.1. above is not required for a six (6) month period during which all control devices subject to LAC 33:V, Subchapter C are operated such that during no period of twenty-four (24) hour or longer did control devices operate continuously in noncompliance with the applicable operating values defined in LAC 33:V.1713.C.4 or a flare operate with visible emissions as defined in LAC 33:V.1707.D.

VII.B.2.d.(4) All reports shall be signed and dated by an authorized representative of the Permittee as per LAC 33:V.507.

TABLE VII.B.1. EMISSION CONTROLS FOR TANKS

(RESERVED)

TABLE VII.B.2. EMISSION CONTROLS FOR CONTAINERS/CONTAINER STORAGE AREAS

(RESERVED)

VII.C. SPECIFIC CONDITION - CLOSURE

Pursuant to Section 3005(j)(1) of the Hazardous and Solid Waste Amendments of 1984, the Permittee shall close any closing units in accordance with the following provisions:

VII.C.1. Other than consolidation of any wastes from the sites in conformance with LAC 33:V.Chapter 22, Land Disposal Restrictions, the Permittee shall not place waste prohibited by LAC 33:V.Chapter 22 into any closing units;

VII.C.2. The Permittee shall perform unit closures in accordance with the Closure Plan(s) as approved at the time of closure, and which meet(s) all relevant State and Federal closure requirements at the time of closure; and

VII.C.3. The Permittee shall notify the Administrative Authority in writing at least sixty (60) days prior to commencement of closure.

VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS—CORRECTIVE ACTION STRATEGY

Corrective Action for Releases: Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA), and LAC 33:V.3322 require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of when the waste was placed in the unit.

EPA's traditional RCRA corrective action approach is structured around several elements common to most activities. In the first phase, RCRA facility assessment (RFA), EPA or the authorized state assesses the facility to identify releases and determine the need for corrective action. In the second phase, RCRA facility investigation (RFI), the facility conducts a more detailed investigation to determine the nature and extent of contaminants released to ground water, surface water, air, and soil. If remedial action is needed, a third phase, corrective measures study (CMS), is started. During this phase, the facility conducts a study, which when completed, describes the advantages, disadvantages, and costs of various cleanup options. After selection of a final remedy, the fourth phase, corrective measures implementation (CMI), is initiated. The facility is required to design, construct, operate, maintain, and monitor the final remedy(s).

The Corrective Action Strategy (CAS) is an alternate corrective action approach that can be implemented during any phase of corrective action for a release area. The Permittee shall use the CAS approach as the framework for corrective action to clarify, facilitate and expedite the process, and shall use the **Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP)** for screening and media-specific cleanup standards. EPA has interpreted the term "release" to mean, "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." (50 FR 2873, July 15, 1985). The CAS refers to "release areas" as solid waste management units (SWMUs) and areas of concern (AOCs) while the

RECAP refers to release areas as areas of investigation (AOIs). SWMUs and AOCs may also be referred to as "AOIs" when investigated and managed under the RECAP.

VIII.A. ALTERNATE CORRECTIVE ACTION

VIII.A.1. Introduction to CAS

This Permit will utilize the CAS Guidance Document (www.epa.gov/Arkansas/6pd/rcra_c/pd-o/riskman.htm) developed by the U.S. Environmental Protection Agency (EPA) Region 6, whenever the Administrative Authority determines that it will serve to facilitate the corrective action. The CAS Guidance Document shall be utilized to the fullest extent practicable for planning and implementation of the corrective action. The CAS in this Permit shall not supersede existing Federal, State, and local regulations. The two primary objectives are to prioritize corrective action at the facility, and streamline corrective action administrative procedures, resulting in the protection of human health and the environment.

The CAS is a performance-based approach; using data quality objectives, investigations begin with the endpoint in mind. The CAS is a risk management strategy that can be implemented during any phase of corrective action. However, the CAS need not be applied to work that has already been completed to the satisfaction of the Administrative Authority. Performance standards are established at the beginning of the corrective action process, allowing earlier and more focused implementation. Releases are screened using RECAP screening numbers to determine the priority of corrective action, and remedial alternatives are selected on the basis of their ability to achieve and maintain the established performance standards.

There is no one specific path through the CAS process. The CAS is a facility-wide approach, focusing corrective action on releases that pose the greatest risk first. Screening releases will also enable some areas of interest to qualify for no further action at this time (Condition VIII.A.3.a.), thus resources can be used to best benefit the protection of human health and the environment. The CAS process also considers activities previously conducted under the traditional corrective action process. Appendix 1 of this permit contains a summary of corrective action activities completed to date and also describes where the Permittee is in the CAS process at the time of issuance of this permit. The applicability of various provisions of the CAS will depend on where the Permittee is in the CAS process as detailed in Appendix 1.

The traditional RCRA corrective action process and reports (i.e., RFIs, CMSs, CMIs, etc.) are not elements of the CAS. However, the use of information and reports from the traditional corrective action process, if available, is encouraged, in addition to new site-specific information.

The Administrative Authority, through an agency-initiated permit modification, may remove the CAS as the means of facility-wide corrective action in the case of the failure of the Permittee to disclose information, abide by the terms and conditions of this permit, adhere to agreed schedules, or show adequate progress; or should an impasse occur between the Permittee and the Administrative Authority. The Administrative Authority will institute other means of corrective action (such as traditional corrective action) at the facility through modification of this permit.

VIII.A.2. Performance Standards

Expectations for the outcome of corrective action at a facility are established in the CAS by three performance standards as defined in Conditions VIII.A.2.a through c. The Permittee's proposed performance standards shall be presented during the scoping meeting. The Permittee must justify the proposed performance standards through evaluation and documentation of land use, ground water designation (current and reasonably expected future use), types of receptors present, exposure pathways, etc.; as described in RECAP, Chapter 2. Through the application of the performance standards and RECAP, the Permittee and Administrative Authority shall determine whether a release must be addressed through corrective action, and whether implemented corrective actions are protective of human health and the environment.

The Permittee shall submit the performance standards in writing along with the Conceptual Site Model (Condition VIII.D) within one-hundred and twenty (120) days after the scoping meeting. The Administrative Authority may either approve the performance standards proposed by the Permittee or establish performance standards that the Administrative Authority deems necessary to protect human health and the environment.

The three CAS performance standards are defined below. The order in which the performance standards are listed does not indicate that one performance standard takes priority over another. All applicable performance standards must be achieved by the Permittee.

VIII.A.2.a. Source Control Performance Standard

Source control refers to the control of materials that include or contain hazardous wastes or hazardous constituents that act as a reservoir for migration of contamination to soil, sediment, ground water, surface water, or air, or as a source for direct exposure.

The facility must determine if source material is present. Removal, containment, treatment, or a combination of the three, must be evaluated on a case-by-case basis. Controlling source material is a predominating issue in the CAS, and must be addressed to ensure protectiveness over time. Prioritization of the SWMUs and AOCs does not mean avoidance of controlling source materials.

VIII.A.2.b. Statutory and Regulatory Performance Standard

Applicable statutory and regulatory requirements (Federal, State, and local) must be identified. These requirements may dictate media-specific contaminant levels (e.g., maximum contaminant levels (MCLs) in drinking water) that must be achieved and may become a performance standard for the Permittee.

VIII.A.2.c. Final Risk Goal Performance Standard

The final risk goal is the level of protection to be achieved and maintained by the Permittee. The final risk goal shall be based on site-specific issues including land use, special subpopulations, contaminant concentrations based on acceptable risk, location at which the levels are measured, and the remediation time frame, as specified by RECAP.

One final risk goal may apply to the entire facility, but it is more likely that different releases will require different final risk goals due to variations in location of releases, land use, proximity of receptors, etc. The final risk goal will be based on sound risk assessment methodologies (Condition VIII.A.3).

VIII.A.3. Use of RECAP

The latest edition of the RECAP document shall be used by the Permittee to determine the need for further corrective actions under this permit. The RECAP consists of a tiered framework comprised of a Screening Option (SO), and three Management Options (MO). The tiered management options allow site evaluation and corrective action efforts to be tailored to site conditions and risks. As the MO level increases, the approach becomes more site-specific and hence, the level of effort required to meet the objectives of the Option increases.

The RECAP shall be used by the Permittee to evaluate data quality and data usability (RECAP Section 2.4 and 2.5), to determine the identity of an AOI as described in RECAP Section 2.6, and for estimations of Area of Investigation Concentrations and Groundwater Compliance Concentrations for each media as defined in RECAP Section 2.8.

The RECAP shall be used by the Permittee to evaluate land use as described in RECAP Section 2.9, and groundwater/aquifer use as described in RECAP Section 2.10.

The RECAP shall be used by the Permittee to prioritize AOCs, SWMUs, and AOIs that require remediation so site investigations are focused on the release areas that pose the greatest risk. As the CSM is compiled, the Permittee shall assess historical

data (RECAP Section 2.5) and use the following management options, as appropriate, to address each release site.

VIII.A.3.a. Screening Option

The Permittee shall use the Screening Standards (SS) which are LDEQ-derived screening numbers for soil and groundwater for non-industrial and industrial land use scenarios. The SS shall be used to demonstrate that an AOI does not pose a threat to human health and the environment and, hence does not require further action at this time (NFA-ATT) or that further evaluation is warranted under a higher Management Option.

VIII.A.3.b. Management Option 1

The Permittee shall use Management Option 1 (MO-1) which provides a RECAP standard (RS) derived for non-industrial and industrial exposure scenarios using currently recommended default exposure parameters and toxicity values. Under MO-1, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-1 limiting RS, then the Permittee may; (1) remediate to the MO-1 limiting RS (and comply with closure/post closure requirements for MO-1), or (2) proceed with a MO-2 or MO-3 evaluation.

VIII.A.3.c. Management Option 2

The Permittee shall use Management Option 2 (MO-2) which provides for the development of soil and groundwater RS using site-specific data with specified analytical models to evaluate constituent fate and transport at the AOI. The results of this evaluation shall be used in conjunction with standard reasonable maximum exposure (RME) assumptions to identify site-specific MO-2 RS. Under MO-2, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-2 limiting RS, then the Permittee may; (1) remediate to the MO-2 limiting RS (and comply with closure/post closure requirements for MO-2), or (2) proceed with a MO-3 evaluation.

VIII.A.3.d. Management Option 3

The Permittee shall use Management Option 3 (MO-3) which provides the option of using site-specific data for the evaluation of exposure and the evaluation of environmental fate and transport at the AOI. The results of the site-specific evaluation may be to develop site-specific MO-3 RS. Under MO-3, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-3 limiting RS, then the Permittee shall; (1) remediate to the MO-3 RS, (2) conduct confirmatory sampling, and (3) comply with closure/post closure requirements for MO-3.

VIII.A.4. Corrective Action for Releases Beyond Facility Boundary

Section 3004(v) of RCRA as amended by HSWA, and State regulations promulgated as LAC 33:V.3322.C require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

VIII.A.5. Financial Responsibility

As specified in Appendix 1 and Attachment 1 of this Permit, financial assurance responsibility for corrective action has been provided by the Permittee.

VIII.A.6. Summary of Corrective Action Activities

A summary of the corrective action activities associated with the facility is provided in Condition VIII, Appendix 1 of this permit. AOCs and SWMUs that are currently being managed or proposed for management under a prescribed corrective action program (e.g., groundwater order, corrective action order, CERCLA) are identified in Condition VIII, Appendix 1, Table 1, of this permit.

VIII.A.7. Approval of Alternate Schedule

The Permittee may submit a written request for an alternate schedule for a submittal deadline as presented in Condition VIII, Table 1. The request should propose a specific alternate schedule and include an explanation as to why the alternate schedule is necessary. The Administrative Authority will consider site-specific criteria in either approving or disapproving the request for an alternate schedule.

VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING

VIII.B.1. Notice of Intent

The Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the CAS within sixty (60) days of the effective date of this permit. The notice of intent should state the following in a concise manner:

VIII.B.1.a. General information regarding facility location;

VIII.B.1.b. General information regarding the facility's operational history;

VIII.B.1.c. General discussion on how the Permittee will proceed through the CAS;

VIII.B.1.d. Brief description of proposed performance standards for corrective action; and

VIII.B.1.e. Propose a date for a scoping meeting between the Permittee and the Administrative Authority to be held within sixty (60) days of the date of the Notice of Intent.

VIII.B.2. Scoping Meeting

The scoping meeting will serve as the first CAS milestone where the Permittee and the Administrative Authority identify expectations concerning CAS implementation. The length and extent of the meeting will depend on the complexity of the site. Agreements on land use, groundwater classification, the level of detail required in the conceptual site model (see Condition VIII.D) and expectations for remediation goals will be discussed during the scoping meeting(s). During the scoping meeting the Permittee will present the following information to the Administrative Authority:

VIII.B.2.a. A conceptual site model (if one already has been developed);

VIII.B.2.b. Discussions on history of corrective action at the facility, including facility investigations, risk evaluations or risk assessments, interim measure/stabilizations and final remedies implemented;

VIII.B.2.c. Proposed performance standards for the facility with justification, and potential risk management approaches;

VIII.B.2.d. Discussions on how the Permittee plans to use the CAS to meet its corrective action obligations, including permitting and compliance issues;

VIII.B.2.e. A Communication Strategy Plan that specifies where in the CAS process the Permittee is currently and how the Permittee will provide information about future progress at the facility to the Administrative Authority (i.e., progress reports, conference calls, routine meetings, etc.);

VIII.B.2.f. Site-specific concerns (i.e., sensitive environments or special subpopulations);

VIII.B.2.g. Need for interim measures or stabilization activities, if necessary; and

VIII.B.2.h. Schedule for submittal of the CAS Investigation Workplan and proposed schedule for conducting and completing CAS requirements, including public participation.

Information plans and reports that have already been developed by the Permittee during the corrective action process can be referenced during the scoping meeting.

The Permittee must coordinate with the Administrative Authority in order to determine the date, time, and location of the scoping meeting.

VIII.C. REPORTING REQUIREMENTS

VIII.C.1. The Permittee shall submit, in accordance with Condition VII.A.8, signed reports of all activities conducted pursuant to the provisions of this Permit as required by the Administrative Authority. The reporting schedule shall be determined on a case-by-case basis by the Administrative Authority. These reports shall contain, as applicable to the stage of corrective action, the information required by CAS, as well as the following:

VIII.C.1.a. A description of the work completed and an estimate of the percentage of work completed;

VIII.C.1.b. Summaries of all findings, including summaries of laboratory data;

VIII.C.1.c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

VIII.C.1.d. Projected work for the next reporting period;

VIII.C.1.e. Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

VIII.C.1.f. Changes in key project personnel during the reporting period; and

VIII.C.1.g. Summaries of all changes made in implementation during the reporting period.

VIII.C.2. Copies of other reports relating to or having bearing upon the corrective action work (e.g., inspection reports, drilling logs and laboratory data) shall be made available to the Administrative Authority upon request.

VIII.C.3. In addition to the written reports as required in Condition VIII.C.1 and VIII.C.2 above, at the request of the Administrative Authority, the Permittee shall provide status review through briefings with the Administrative Authority.

VIII.C.4. The determination and approval of remedy selections, schedules of submittals and minor changes to any corrective action workplans may be made by the Administrative Authority during the scoping meeting or status review briefings as described in Condition VIII.C.3.

VIII.D. SPECIFIC CONDITION – CONCEPTUAL SITE MODEL (CSM)

No later than 120 days after the scoping meeting, the Permittee shall submit to the Administrative Authority a CSM (along with the Performance Standards detailed in Condition VIII.A.2) or an update of any CSM submitted at the scoping meeting providing background information and the current conditions at the facility. The level of detail required for the CSM will be discussed during the scoping meeting. At a minimum, the CSM must address current site conditions, land use, known and/or potential constituent source(s), routes of constituent migration, exposure media (i.e., soil, surface waters, groundwater), exposure points, points of compliance and pathways, receptors and source media to be evaluated under the RECAP. The CSM must include a completed Figure 8 (LAC 33:I.Chapter 13). The Permittee may include completed investigations, existing data, or previously submitted documents in the CSM by reference. References must include the names, dates, and brief summaries of the documents.

If a CSM has been previously developed, the scoping meeting will also provide the opportunity for the Permittee and Administrative Authority to consider and identify all data gaps in the CSM. The initial CSM shall be considered the “base document” to be prepared and updated by the facility as new information is gathered during investigations. The CSM shall be used by the facility to make decisions regarding risk management options, ecological risk, and monitored natural attenuation determinations (RECAP Section 2.16), or technical impracticability (TI) waiver determinations, when appropriate.

The Administrative Authority reserves the right to require revisions to the CSM based upon data resulting from ongoing investigations and activities. Revisions to the CSM may also be required for newly identified SWMUs or AOCs according to Condition VIII.L of this permit (See Appendix 1, Ongoing Corrective Action) and based on new information and information not previously considered by the Administrative Authority.

The CSM shall be divided into Profiles as detailed in Conditions VIII.D.1 through 6. If the Permittee chooses to use existing data and documents in the CSM, it may not be necessary to prepare the Profiles as detailed in Conditions VIII.D.1 through 6. However, the existing documents and data must provide sufficient information and detail which corresponds to the information required by the Facility, Land Use and Exposure, Physical, Release, Ecological, and Risk Management Profiles.

VIII.D.1. Facility Profile

The Permittee shall include in the CSM a Facility Profile which shall summarize the regional location, pertinent boundary features, general facility structures, process areas, and locations of solid waste management units or other potential sources of contaminant migration from the routine and systematic releases of hazardous constituents to the environment (e.g., truck or railcar loading/unloading areas). The Permittee shall also include historical features that may be potential release areas because of past management practices. The Facility Profile shall include:

VIII.D.1.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.1.a.(1) General geographic location;

VIII.D.1.a.(2) Property lines with the owners of all adjacent property clearly indicated;

VIII.D.1.a.(3) Facility structures, process areas and maintenance areas;

VIII.D.1.a.(4) Any other potential release areas shall be delineated, such as railcar loading/unloading areas or any other AOI as described in RECAP Section 2.6; and

VIII.D.1.a.(5) Locations of historical features that may be potential release areas or any areas of past solid and hazardous waste generation, treatment, storage or disposal activities.

VIII.D.1.b. The Facility Profile shall also include a description of ownership and operation of the facility.

VIII.D.1.c. The Permittee shall provide pertinent information for those spills that have not been assessed and reported to the Administrative Authority during facility investigations, addressed by facility spill contingency plans, or previously remediated or deemed for no further action. The information must include at minimum, approximate dates or periods of past waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, federal, or private party response units), including any inspection reports or technical reports generated as a result of the response.

VIII.D.2. Land Use and Exposure Profile

The Permittee shall include in the CSM a Land Use and Exposure Profile which includes surrounding land uses (industrial and non-industrial, as described in RECAP Sections 2.9.1 and 2.9.2), resource use locations (water supply wells, surface water intakes, etc.), beneficial resource determinations (groundwater classifications as described in RECAP Section 2.10), natural resources (wetlands, etc.), sensitive subpopulation types and locations (schools, hospitals, nursing homes, day care centers, etc.), applicable exposure scenarios, and applicable exposure pathways identifying the specific sources, releases, migration mechanisms, exposure media, exposure routes and receptors. The Land Use and Exposure Profile shall include:

VIII.D.2.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.2.a.(1) Surrounding land uses, resource use locations, and natural resources/wetlands;

VIII.D.2.a.(2) Locations of sensitive subpopulations; and

VIII.D.2.a.(3) An exposure pathway flowchart which outlines sources, migration pathways, exposure media and potential receptors as depicted in Figure 8 (CMS example) of the RECAP.

VIII.D.3. Physical Profile

The Permittee shall include in the CSM a Physical Profile which shall describe the factors that may affect releases, fate and transport, and receptors, including; topography, surface water features, geology, and hydrogeology. The Physical Profile shall include:

VIII.D.3.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V.Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.3.a.(1) Topographic maps with a contour interval of five (5) or ten (10) feet, a scale of one inch to 100 feet (1:100), including hills, gradients, and surface vegetation or pavement;

VIII.D.3.a.(2) Surface water features including routes of all drainage ditches, waterways, direction of flow, and how they migrate to other surface water bodies such as canals and lakes;

VIII.D.3.a.(3) Regional geology including faulting and recharge areas, as well as local geology depicting surface features such as soil types, outcrops, faulting, and other surface features;

VIII.D.3.a.(4) Subsurface geology including stratigraphy, continuity (locations of facies changes, if known), faulting and other characteristics;

VIII.D.3.a.(5) Maps with hydrogeologic information identifying water-bearing zones, hydrologic parameters such as transmissivity, and conductivity. Also locations and thicknesses of aquitards or impermeable strata; and

VIII.D.3.a.(6) Locations of soil borings and production and groundwater monitoring wells, including well log information, and construction of cross-sections which correlate substrata. Wells shall be clearly labeled with ground and top of casing elevations (can be applied as an attachment).

VIII.D.4. Release Profile

The Permittee shall include in the CSM a Release Profile which shall describe the known extent of contaminants in the environment, including sources, contaminants of concern (COC), areas of investigations, distribution and magnitude of known COCs with corresponding sampling locations, and results of fate and transport modeling depicting potential future extent/magnitude of COCs. The Release Profile shall include:

VIII.D.4.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V. Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.4.a.(1) Estimations of source concentrations, exposure concentrations and compliance concentrations for each affected media as defined in Section 2.8 of RECAP;

VIII.D.4.a.(2) Isopleth maps depicting lateral extent and concentrations of COCs;

VIII.D.4.a.(3) Results of fate and transport modeling showing potential exposure concentrations and locations; and

VIII.D.4.a.(4) Locations of potential sources including past or present waste units or disposal areas and all SWMUs/AOCs.

VIII.D.4.b. Table(s) depicting the following information for each SWMU/AOC, including but not limited to: location; type of unit/disposal/release area; design features; operating practices (past and present); period of operation; age of unit/disposal/release area; general physical condition; and method of closure.

VIII.D.4.c. Table(s) depicting the following waste/contaminant characteristics for those areas referenced in Condition VIII.D.4.b, including but not limited to: type of waste placed in the unit (hazardous classification, quantity, chemical composition), physical and chemical characteristics (physical form, description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents, cohesiveness, vapor pressure); and migration and dispersal characteristics of

the waste (sorption coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

VIII.D.5. Ecological Profile

The Permittee shall include in the CSM an Ecological Profile that shall describe the physical relationship between the developed and undeveloped portions of the facility, the use and level of disturbance of the undeveloped property, and the type of ecological receptors present in relation to completed exposure pathways. When compiling data for the Ecological Profile, current, as well as, future impacts to receptors and/or their habitats shall be considered. The Ecological Profile shall include:

VIII.D.5.a. A history and description of the developed property on the facility, including structures, process areas, waste management units, and property boundaries;

VIII.D.5.b. A history and description of the undeveloped property, including habitat type (wetland, grassy area, forest, ponds, etc.). Include a description of the primary use, degree and nature of any disturbance, along with proximity to drainage ditches, waterways and landfill areas;

VIII.D.5.c. A description of the site receptors in relation to habitat type, including endangered or protected species, mammals, birds, fish, etc.;

VIII.D.5.d. A description of the relationship between release areas and habitat areas, specifically relating chemicals of potential ecological concern (COEC) to ecological receptors;

VIII.D.5.e. An ecological checklist as described in Section 7.0 of RECAP. An ecological checklist (presented in Appendix C, Form 18 of the RECAP) shall be used to determine if a tier 1 (screening level) Ecological Risk Assessment (ERA) is warranted.

VIII.D.6. Risk Management Profile

The Permittee shall include in the CSM a Risk Management Profile that shall describe how each AOI at the facility will be managed for the protection of human health and the environment. The Risk Management Profile will serve as documentation of the results of the site ranking system (described in Section 2.2 of RECAP). The Risk Management Profile will also document the criteria and verify that the SO, MO-1, MO-2 or MO-3 is appropriate for application at each AOI. The Risk Management Profile shall include:

VIII.D.6.a. A table for tracking the management options for each AOI, and the determination made, whether an AOI is deemed for no further action at

this time (NFA-ATT) or is going to use either the SO, MO-1, MO-2 or MO-3 management option.

VIII.D.6.b. A list of identified site-wide data gaps for further investigation.

VIII.D.6.c. Documentation of all interim measures which have been or are being undertaken at the facility, including under State or Federal compliance orders, other than those specified in the Permit. This documentation shall include the objectives of the interim measures and how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term remedial solution.

VIII.E. INTERIM MEASURES

VIII.E.1. If at any time during the term of this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU/AOC poses a threat to human health and the environment, the Administrative Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and an Interim Measures Workplan. The Administrative Authority may modify this Permit according to LAC 33:V.321 to incorporate interim measures into the Permit. However, depending upon the nature of the interim measures, a permit modification may not be required.

VIII.E.2. The Permittee may propose interim measures at any time by submittal of an Interim Measures Workplan subject to the approval of the Administrative Authority.

VIII.E.3. The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures and may require the submittal of an Interim Measures Workplan. The following factors will be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

VIII.E.3.a. Time required to develop and implement a final remedy;

VIII.E.3.b. Actual and potential exposure to human and environmental receptors;

VIII.E.3.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

VIII.E.3.d. The potential for further degradation of the medium in the absence of interim measures;

VIII.E.3.e. Presence of hazardous wastes in containers that may pose a threat of release;

VIII.E.3.f. Presence and concentration of hazardous waste including hazardous constituents in soil that has the potential to migrate to ground water or surface water;

VIII.E.3.g. Weather conditions that may affect the current levels of contamination;

VIII.E.3.h. Risks of fire, explosion, or accident; and

VIII.E.3.i. Other situations that may pose threats to human health and the environment.

VIII.E.5. Upon approval of the Interim Measures Workplan and completion of the interim measure(s) implementation, the Permittee will submit a report to the Administrative Authority describing the completed work.

VIII.E.6. At anytime during or after the interim measure(s), including the issuance of an NFA-ATT, the Administrative Authority may require the Permittee to submit the SWMUs/AOCs for further corrective action.

VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN

VIII.F.1. The CAS Investigation Workplan that describes site investigation activities for corrective action shall be submitted to the Administrative Authority within 180 days after the scoping meeting between the Permittee and the Administrative Authority. The CAS Investigation Workplan must address releases of hazardous waste or hazardous constituents to all media, unless otherwise indicated, for those SWMUs/AOCs listed in Appendix 1, Table 1. The focus of the site investigation phase for corrective action is to collect data to fill in data gaps identified in the CSM. The corrective action investigations may be conducted in phases if warranted by site conditions, contingent upon approval by the Administrative Authority.

VIII.F.1.a. The CAS Investigation Workplan shall describe the management options (MO) for each AOI/release area, data quality objectives for achieving each management option, and proposals for release characterizations (sampling and analysis/quality assurance plans) to support the data quality objectives (DQOs). (DQOs are determined based on the end use of the data to be collected, and the DQO development process should be integrated into project planning and refined throughout the CAS implementation. DQOs shall be used to 1) ensure that environmental data are scientifically valid, defensible, and of an appropriate level of quality given the intended use, and 2) expedite site investigations. The CAS Investigation Workplan is required to have DQOs that are developed to support the performance standard for each

release.) The CAS Investigation Workplan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the site investigations. The scope of work for the site investigation can be found in RECAP Appendix B.

VIII.F.1.b. The CAS Investigation Workplan shall describe sampling, data collection quality assurance, data management procedures (including formats for documenting and tracking data and other results of investigations) and health and safety procedures.

VIII.F.1.c. Development of the CAS Investigation Workplan and reporting of data shall be consistent with the latest version of the following EPA and State guidance documents or the equivalent thereof:

VIII.F.1.c.(1) Guidance for the Data Quality Assessment, Practical Methods for Data Analysis. QA97 Version EPA QA/G-9. January 1998;

VIII.F.1.c.(2) Guidance for the Data Quality Objectives Process. EPA QA/G-4. September 1994;

VIII.F.1.c.(3) Data Quality Objectives Remedial Response Activities. EPA/540/G87-003. March 1987;

VIII.F.1.c.(4) Guidance on Quality Assurance Project Plans. EPA QA/G-5. February 1998;

VIII.F.1.c.(5) Interim EPA Data Requirements for Quality Assurance Project Plans. EPA Region 6, Office of Quality Assurance. May 1994;

VIII.F.1.c.(6) 29 CFR 1910.120 (b) for the elements to Health and Safety plans;

VIII.F.1.c.(7) RCRA Groundwater Monitoring: Draft Technical Guidance EPA/530-R-93-001 November 1992;

VIII.F.1.c.(8) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, 3rd Edition. November 1992, with revisions;

VIII.F.1.c.(9) The LDEQ Handbook - Construction of Geotechnical Boreholes and Groundwater Monitoring Systems," prepared by the LDEQ and the Louisiana Department of Transportation and Development.

This document is printed by and available from the Louisiana Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245; and

VIII.F.1.c.(10) The LAC 33:I.Chapter 13 and Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP).

VIII.F.2. After the Permittee submits the CAS Investigation Workplan; the Administrative Authority will approve, disapprove, or otherwise modify the CAS Investigation Workplan in writing. All approved workplans become enforceable components of this Permit.

In event of disapproval (in whole or in part) of the workplan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the CAS Investigation Workplan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified workplan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the ground for the exception within fourteen (14) days of receipt of the disapproval.

VIII.F.3. The Administrative Authority shall review for approval, as part of the CAS Investigation Workplan or as a new workplan, any plans developed pursuant to Condition VIII.L addressing further investigations of newly-identified SWMUs/AOCs, or Condition VIII.M addressing new releases from previously-identified SWMUs/AOCs.

VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS

No later than fourteen (14) days after the Permittee has received written approval from the Administrative Authority for the CAS Investigation Workplan, the Permittee shall implement the site investigation activities according to the schedules and in accordance with the approved CAS Investigation Workplan and the following:

VIII.G.1. The Permittee shall notify the Administrative Authority at least 10 working days prior to any field sampling, field-testing, or field monitoring activity required by this Permit to give LDEQ personnel the opportunity to observe investigation procedures and/or split samples.

VIII.G.2. Deviations from the approved CAS Investigation Workplan, which are necessary during implementation, must be approved by the Administrative Authority and fully documented and described in the progress reports (Condition VIII.C), RECAP Report (Condition VIII.H) and the final Risk Management Plan (Condition VIII.J).

VIII.H. RECAP REPORT

Within ninety (90) days after completion of the site investigation the Permittee shall submit a RECAP Report to the Administrative Authority for approval. The RECAP Report shall document the results of the site investigation activities, and the evaluation of the impacts from releases. The Administrative Authority will review and evaluate the report and provide the Permittee with written notification of the report's approval or a notice of deficiency. If the Administrative Authority determines the RECAP Report does not fully meet the objectives stated in the CAS Investigation Workplan (Permit Condition VIII.F), the Administrative Authority shall notify the Permittee in writing of the report's deficiencies, and specify a due date for submittal of a revised Final Report to the Administrative Authority.

VIII.H.1. The Permittee shall screen site-specific data using the appropriate RECAP standard (RS) for each AOI (depending on the MO), evaluate impacts from releases with exposure scenario evaluations, and update the Risk Management Profile of the CSM.

VIII.H.2. The report shall include, but not be limited to, the following:

VIII.H.2.a. Documentation of site investigation activities and results;

VIII.H.2.b. Evaluation of exposure scenarios to document impacts from releases;

VIII.H.2.c. Deviations from the CAS Investigation Workplan;

VIII.H.2.d. Results of screening activities using RECAP standards (RS), including SO, MO-1, MO-2, or MO-3 RS for each media;

VIII.H.2.e. The revised CSM with updated profiles which incorporate investigation and screening results; and

VIII.H.2.f. Proposed revisions to performance standards based on new information (e.g., change in land use, difference in expected receptors and/or exposure, or other differences in site conditions), if warranted.

VIII.I. REMEDIAL ALTERNATIVES STUDY

Upon completion and approval of the RECAP Report, the Permittee shall proceed with the evaluation of remedial alternatives to complete corrective action for each AOI according to the performance standards described in Condition VIII.A.2. The remedial alternatives shall be submitted to the Administrative Authority in the Remedial Alternatives Study (RAS) within ninety (90) days of the Administrative Authority's approval of the RECAP Report. In the Remedial Alternatives Study, the Permittee shall identify and evaluate various potential remedies that would meet the performance-based corrective action objectives and propose one or more specific remedies based on an evaluation of applicable data and available

corrective action technologies. The RAS shall be prepared in a manner that addresses the extent and nature of the contamination at the facility.

VIII.I.1. The Permittee shall evaluate remedies for each AOI that shall:

VIII.I.1.a. attain compliance with corrective action objectives for releases of hazardous waste and/or hazardous constituents, as established in the Conceptual Site Model or in later investigations approved by the Administrative Authority;

VIII.I.1.b. control sources of releases;

VIII.I.1.c. meet acceptable waste management requirements;

VIII.I.1.d. protect human health and the environment; and

VIII.I.1.e. meet applicable statutory and regulatory requirements (as noted in Condition VIII.A.2.b).

VIII.I.2. The Permittee shall evaluate the use of presumptive remedies and innovative technologies to achieve the appropriate remedial performance standards for each AOI.

VIII.I.3. The Permittee shall review the current interim measures/ stabilization activities to evaluate if these measures meet all the criteria for final remedy.

VIII.I.4. If under certain site-specific conditions, or when it is not technically or economically feasible to attain the corrective action objectives, the Permittee may propose to use institutional controls to supplement treatment or containment-based remedial actions upon approval of the Administrative Authority (Section 2.15 of RECAP).

VIII.I.5. The RAS shall at a minimum include:

VIII.I.5.a. An evaluation of the performance reliability, ease of implementation, and the potential impacts of the potential remedies;

VIII.I.5.b. An assessment of the effectiveness of potential remedies in achieving adequate control of sources and meeting remedial performance standards;

VIII.I.5.d. An assessment of the costs of implementation for potential remedies;

VIII.I.5.e. An assessment of the time required to begin and complete the remedy;

VIII.I.5.f. An explanation of the rationale for the remedy proposed for each AOI or group of AOIs; and

VIII.I.5.g. An assessment of institutional requirements (e.g., state permit requirements that may impact remedy implementation).

VIII.I.6. The Administrative Authority will review and evaluate the RAS and provide the Permittee with written notification of the study's approval or a notice of deficiency. If the Administrative Authority determines the RAS does not fully meet the requirements detailed in Conditions VIII.I.1 through VIII.I.5, the Administrative Authority shall notify the Permittee in writing of the RAS's deficiencies, and specify a due date for submittal of a revised RAS to the Administrative Authority. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J. RISK MANAGEMENT PLAN

Within ninety (90) days of the Administrative Authority's approval of the RAS, the remedy/remedies proposed for selection shall be documented and submitted in the Risk Management Plan. The Permittee shall propose corrective action remedies in accordance with Chapter IV of the RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A or as directed by the Administrative Authority.

VIII.J.1. The Risk Management Plan shall at a minimum include:

VIII.J.1.a. A summary of the remedial alternatives for each AOI and the rationale used for remedy selection;

VIII.J.1.b. The final CSM with proposed remedies, including locations of AOIs addressed by a risk management activity, COC concentrations that represent the long-term fate and transport of residual COCs and the exposure pathways affected by the risk management activity;

VIII.J.1.c. Cost estimates and implementation schedules for proposed final remedies;

VIII.J.1.d. Proposed remedy design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, property access, easements and right-of-way requirements, special health and safety requirements, and community relations activities;

VIII.J.1.e. Remedy performance criteria and monitoring:

The Permittee shall identify specific criteria (such as land use changes, fate and transport model verification and constructed remedy performance) that will be evaluated to demonstrate that the risk management activity

implemented will remain protective. A schedule for periodic performance review (such as monitoring data summaries, including graphical and statistical analyses) shall be established to demonstrate that the implemented activities are consistently achieving and maintaining desired results. Further, a mechanism shall be established to re-evaluate risk management activities in the event the implemented action does not achieve and maintain the performance standards;

VIII.J.1.f. Contingency plans; and

VIII.J.1.g. Description and schedules for performance reviews.

VIII.J.2. After the Permittee submits the Risk Management Plan, the Administrative Authority will review and evaluate the plan and subsequently either inform the Permittee in writing that the plan is acceptable for public review or issue a notice of deficiency.

VIII.J.3. If the Administrative Authority determines the Risk Management Plan does not fully meet the remedial objectives, the Administrative Authority shall notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised Final Risk Management Plan. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J.4. After the Administrative Authority has determined the Risk Management Plan is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the plan as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.J.5. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.J.6. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.3 of this permit.

VIII.J.7. If, after considering all public comments, the Administrative Authority determines that the Risk Management Plan is adequate and complete, the Administrative Authority will issue a public notice for final approval the Class 3 permit modification. The resultant modified permit will include schedules for remedy implementation as well as financial assurance provisions as required by Condition VIII.A.5 of this permit.

VIII.K. DETERMINATION OF NO FURTHER ACTION

VIII.K.1. NFA-ATT DETERMINATIONS FOR SPECIFIC SWMUs/AOCs

VIII.K.1.a. Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1¹ permit modification (¹ requiring Administrative Authority approval) request under LAC 33:V.321.C.1. The NFA-ATT request must contain information demonstrating that there are no releases of hazardous constituents from a particular SWMU/AOC that pose a threat to human health and/or the environment.

The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used.

VIII.K.1.b. If, based upon review of the Permittee's request for a permit modification, the results of the site investigations, and other information the Administrative Authority determines that releases or suspected releases from an individual SWMU/AOC which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

VIII.K.1.c.

In accordance with LAC 33:V.321.C.1.a.ii, the Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1¹ permit modification.

VIII.K.2. FACILITY-WIDE NFA-ATT DETERMINATION

VIII.K.2.a. Upon the completion of all activities specified in the Risk Management Plan and after all SWMUs and AOCs at the facility have been remediated according to the standards dictated by the selected RECAP MO, the Permittee shall submit a summary report supporting a determination of NFA-ATT on a facility-wide basis.

VIII.K.2.b. The summary report must include a historical narrative for each SWMU/AOC at the site that includes a summary of the investigation, sampling & analysis, remedial, and confirmatory sampling activities leading to the NFA-ATT request. The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used. The facility-wide NFA-ATT determination must consider any newly-identified SWMUs/AOCs discovered after submittal of the Risk Management Plan.

VIII.K.2.c. The Administrative Authority will review and evaluate the summary report and subsequently either inform the Permittee in writing that the report is acceptable for public review or issue a notice of deficiency.

VIII.K.2.d. If the Administrative Authority determines the summary report does not fully demonstrate that all remedial objectives have been satisfied, the Administrative Authority shall notify the Permittee in writing of the summary report's deficiencies and specify a due date for submittal of a revised summary report.

VIII.K.2.e. After the Administrative Authority has determined the facility-wide NFA-ATT summary report is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the summary report as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.K.2.f. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.K.2.g. If, based upon review of the Permittee's Class 3 permit modification request, the results of the site investigations, confirmatory sampling, and other pertinent information, the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will grant the modification request.

VIII.K.2.h. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.4 of this permit.

VIII.K.2.i. If, after considering all public comments, the Administrative Authority determines that all activities specified in the Risk Management Plan have been completed and that all SWMUs and AOCs have been remediated to the selected MO, the Class 3 permit modification for facility-wide NFA-ATT will receive final approval. The CAS permit conditions will remain a part of the modified permit in the event that the remedial actions taken fail to maintain the established performance standard and to address any SWMUs/AOCs discovered at a later date.

VIII.K.3. CONTINUED MONITORING

If necessary to protect human health and/or the environment, a determination of NFA-ATT shall not preclude the Administrative Authority from requiring continued monitoring of air, soil, groundwater, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

VIII.K.4. ADDITIONAL INVESTIGATIONS

A determination of NFA-ATT shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU/AOC at the facility that is likely to pose a threat to human health and/or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to LAC 33:V.321.

VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs

VIII.L.1. The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMUs and potential AOCs (i.e., a unit or area not specifically identified during previous corrective action assessments, RFA, etc.), discovered in the course of ground water monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later than thirty (30) days after construction. The notification shall include the following items, to the extent available:

VIII.L.1.a. The location of the newly-identified SWMU or potential AOC on the topographic map required under LAC 33:V.517.B. Indicate all existing units (in relation to other SWMUs/AOCs);

VIII.L.1.b. The type and function of the unit;

VIII.L.1.c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

VIII.L.1.d. The period during which the unit was operated;

VIII.L.1.e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

VIII.L.1.f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU/AOC.

VIII.L.2. Based on the information provided in the notification, the Administrative Authority will determine whether or not the area is a newly-identified SWMU or AOC. If the area is determined to be a newly-identified SWMU or AOC, the Administrative Authority will inform the Permittee in writing and request that the Permittee submit a Class 1¹ permit modification request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 1 of this permit.

Further, the Administrative Authority will determine the need for further investigations or corrective measures at any newly identified SWMU or AOC. If the Administrative Authority determines that such investigations are needed, the Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU or AOC will be reviewed for approval as part of the current CAS Investigation Workplan or a new CAS Investigation Workplan. The results of the investigation of any newly-discovered SWMU/AOC shall be incorporated into the CSM.

VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC

The Permittee shall notify the Administrative Authority of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of ground water monitoring, field investigation, environmental auditing, or other means. The notification must be in accordance with the procedures specified in Conditions II.E.16 through II.E.20 of this permit and based upon the nature, extent, and severity of the release. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the CSM, completed RECAP Report, or investigation of an AOC, the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification.

The Administrative Authority may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the CAS Investigation Workplan or a new CAS Investigation Workplan. The Permit will be modified to incorporate the investigation, according to the Class 1¹ permit modification procedures under LAC 33:V.321. The results of the investigation of any newly-identified release(s) shall be incorporated into the CSM.

VIII.N. PUBLIC PARTICIPATION REQUIREMENTS

Public participation is an essential element in the implementation of any corrective action program at the facility. The CAS promotes the early and continued involvement of stakeholders in site remediation activity during permit issuance, renewal, or modification. The public is invited to review and comment on the corrective action requirements contained in any draft permitting decisions or draft permit modification documents and the associated plans and reports submitted by the Permittee. The Administrative Authority reserves the right to require more extensive public participation requirements based upon site-specific conditions and other relevant factors (e.g., compliance history, potential offsite impact, community interest, etc.). At a minimum, the public participation requirements shall include the following.

VIII.N.1. NFA-ATT Determinations for Specific SWMUs/AOCs

Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1¹ permit modification request under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1¹ permit modification request, in accordance with LAC 33:V.321.C.1.a.ii and Condition VIII.K.1.c of this permit.

VIII.N.2. Draft Permitting Decision

The public may review and comment on the terms and conditions of the CAS during the public notice and comment period of the draft permitting decision. The Administrative Authority shall issue public notice upon preparation of the draft permitting decision in accordance with LAC 33:V.715. During the forty-five (45) day public comment period, the Administrative Authority will accept public comments on the draft permitting decision. At the end of the public comment period, the Administrative Authority will consider and address all public comments and make any necessary revisions to the draft permitting decision. After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permitting decision. The final permitting decision will include a "Responsiveness Summary" detailing all comments received on the draft permitting decision and the actions taken (if necessary) to correct the draft before issuance of the final permitting decision.

VIII.N.3. Final Remedy Selection

The public may review and comment on the terms and conditions of the Risk Management Plan as described in Conditions VIII.J.4 through VIII.J.7 of this permit. If after addressing all public comments the Administrative Authority determines that the Risk Management Plan is satisfactory, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will identify the proposed remedy for corrective action at the site and the reasons for its selection, describe all other remedies that were considered, and solicit for public review and comments on the Risk Management Plan included in the draft permit modification document.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

VIII.N.4. Facility-Wide NFA-ATT

Upon the completion of all activities specified in the Risk Management Plan and after all facility remedial objectives have been met, the Permittee may submit a summary report for a determination of NFA-ATT on a facility-wide basis in accordance with Condition VIII.K.2 of this permit. The public may review and comment on the summary report as described in Condition VIII.K.2.b. If after addressing all public comments the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will provide a summary detailing contamination sources, site investigations, the MO selected for the facility, facility remedial standards, remedial actions, and sampling results demonstrating that the facility remedial standards have been achieved.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

Table 1: Corrective Action Strategy Notification and Reporting Requirements

Below is a summary of the major notifications and reports that may be required by the Administrative Authority under the Corrective Action Strategy of this Permit in the event of releases requiring RCRA corrective action. The Administrative Authority will notify the Permittee of the notification and reporting requirements during the scoping meeting or another applicable stage of the corrective action process.

ACTION	DUE DATE
Submit Notice of Intent to request use of the CAS to the Administrative Authority for review and comment (Condition VIII.B.1)	RESERVED
CAS Scoping Meeting held between facility and Administrative Authority (Condition VIII.B.2)	RESERVED
Submit Progress Reports on all activities to the Administrative Authority (Condition VIII.C.1)	Schedule to be determined by the Administrative Authority on a case-by-case basis
Make available other reports relating to corrective action to the Administrative Authority (Condition VIII.C.2)	Upon request of the Administrative Authority
Provide briefings to the Administrative Authority (Condition VIII.C.3)	As necessary and upon request by the Administrative Authority
Submit Conceptual Site Model (CSM) (Condition VIII.D) and facility Performance Standards (Condition VIII.A.2) to the Administrative Authority	RESERVED
Perform Interim Measures (Condition VIII.E)	As determined by the Administrative Authority on a case by case basis
Submit Corrective Action Strategy (CAS) Workplan for the facility investigation to the Administrative Authority (Condition VIII.F)	RESERVED
Implement site investigation activities under CAS Investigation Workplan according to approved schedule (Condition VIII.G)	RESERVED
Submit RECAP Report to the Administrative Authority (Condition VIII.H)	RESERVED
Submittal of Remedial Alternatives Study (RAS) to the Administrative Authority (Condition VIII.I)	RESERVED
Submit Risk Management Plan to the Administrative Authority (Condition VIII.J)	RESERVED
Submit requests for unit specific and facility-wide NFA-ATT determinations to the Administrative Authority (Condition VIII.K)	As necessary
Notification of newly-identified SWMUs and potential AOCs (Condition VIII.L)	Thirty (30) days after discovery
Notification of newly-discovered releases (Condition VIII.M)	According to the requirements of Conditions II.E.16 through II.E.20 of this permit

APPENDIX 1: SUMMARY OF CORRECTIVE ACTION ACTIVITIES

Monsanto Company has completed all assessment and investigatory obligations at its Luling Facility. Monsanto Company has implemented the final remedy and the associated financial assurance at the Luling Facility. The Permittee has instituted monitored natural attenuation as a final remedy at the AN Ponds 4&5. A description of the remedy selected in provided in Tables 2, 3, and 4 in Appendix 1.

The Corrective Action at the AN Ponds 4&5 must meet the requirements listed in Permit Conditions VI.G, General Requirements, VI.K, Construction and Abandonment of Monitoring Wells and Geotechnical Boreholes, and VI.L Reporting and Notification Requirements. In the event any new AOCs or SWMUs are discovered, Appendix 1 will be modified in accordance with Condition VIII.M.

The Permittee provided financial assurance in the form of a financial test in accordance with LAC 33:V.Chapter 37. The financial assurance and associated cost estimate are included in Attachment 1 of this permit. The financial assurance and associated cost estimates must be maintained in accordance with Conditions III.P, III.Q, and III.S. Cost estimates for the corrective action at the AN Ponds 4&5 are based on the assumption of thirty (30) year care; however, the assumption of thirty (30) year care is for the purposes of cost estimation only and does not mean that the Permittee's responsibility for corrective action at the AN 4&5 Pond is for a thirty (30) year duration.

TABLE 1. SUMMARY OF CORRECTIVE ACTION ACTIVITIES

<i>AOC/SWMU Group or Area</i>	<i>AOC/SWMU Description</i>	<i>Status of Activity</i>	<i>CA</i>	<i>Corrective Action</i>	<i>EDMS² Document ID Approval Date</i>
Old Landfill	Closed Landfill (pre-RCRA Unit)	NFA-ATT		Not Applicable	32371258
AN Ponds 4&5	Impoundments previously regulated under the solid waste regulations, LAC 33: Part VII. Solid Waste	Final Selected Implemented	Remedy and	Monitored Natural Attenuation	27595330
APAP Plant/PNP Area	Closed units previously regulated under the solid waste regulations, LAC 33: Part VII. Solid Waste	NFA-ATT		Removal of contaminated soil and groundwater monitoring	27561724

Table 2
Monitoring Well Network

Well Name	Associated Unit	Well Type	Zone Screened	Sampling Frequency and Parameter Sets ^{1,2}
AE-1	AN Ponds 4&5 (HWA)	Plume Defining	IV	A
AE-2	AN Ponds 4&5 (HWA)	Plume Defining	IV	A
AE-3	AN Ponds 4&5 (HWA)	POC	II	A,Q
AE-4	AN Ponds 4&5 (HWA)	Plume Defining	II	A,Q
RFI-A	AN Ponds 4&5 (HWA)	Plume Defining	II	A,Q
RFI-B	AN Ponds 4&5 (HWA)	Observation	II	A,Q
RFI-C	AN Ponds 4&5 (HWA)	POC	II	A,Q
RFI-D	AN Ponds 4&5 (HWA)	POC	II	A,Q
RFI-E	AN Ponds 4&5 (HWA)	Plume Defining	II	A,Q
RFI-G	AN Ponds 4&5 (HWA)	Upgradient	II	A,Q
RFI-H	AN Ponds 4&5 (HWA)	POC	IV	A
RFI-I	AN Ponds 4&5 (HWA)	Plume Defining	II	A,Q
RFI-J	AN Ponds 4&5 (HWA)	Plume Defining	II	A,Q
RFI-K	AN Ponds 4&5 (HWA)	Plume Defining	II	A,Q
RFI-L	AN Ponds 4&5 (HWA)	Plume Defining	II	A,Q
AN-3	AN Ponds 4&5 (HWA)	Upgradient	IV	A
AN-4	AN Ponds 4&5 (HWA)	Piezometer	IV	N/A
AN-5	AN Ponds 4&5 (HWA)	Plume Defining	IV	A

(1) Table 3 lists the analytes associated with each parameter set.

(2) Sampling is performed semiannually during the 2nd and 4th quarters.

Table 3
Parameter Set for Groundwater Monitoring
Field Parameters (All Wells)¹

	Water Level Measurements
	Total Depth Measurements
	pH
	<i>Specific Conductivity</i>
	Temperature
	Turbidity
Parameter Set A (HSA Wells)	
VOCs	Benzene
	1,2 – Dichloroethane (EDC)
	Vinyl Chloride (Chloroethene)
	Chloroethane
	2 – Chloroethanol
	Ethanol
	2 – Chloroacetate
	Acetate
Parameter Set Q (Monitored Natural Attenuation Parameters)	
Metals	Total Iron
	Dissolved Iron
Conventional Chemistry	Alkalinity
	Sulfate
	Chloride
	Nitrate
	Sulfide
	TOC (Total Organic Carbon)
Dissolved Gases	Oxygen
	Carbon Dioxide
	Carbon Monoxide
	Methane
	Ethane
	Ethene
Field Measurements	Dissolved Oxygen
	REDOX

(1) Only depth to water measurements will be collected from piezometers.

Table 4
Groundwater Monitoring Parameters

Parameter	Container Type	Preservation Method	Analytical Method ⁽²⁾	Concentration Limit ⁽³⁾ (ug/L)
Specific Conductivity ⁽¹⁾	Plastic or glass if shipped to lab	None	9050	N/A
pH ⁽¹⁾	Plastic or glass if shipped to lab	Field Measure	9040	N/A
REDOX	N/A	N/A	Direct Measure	N/A
Temperature	N/A	N/A	170.1	N/A
Turbidity	N/A	N/A	180.1	N/A
Water Level Measurements	N/A	N/A	N/A	N/A
Dissolved Oxygen (field)	N/A	N/A	Direct Measure	N/A
1,2-Dichloroethane	3 x 40mL glass vials	HCl and Cool to 4°C	8260	5
2-Chloroethanol	3 x 40mL glass vials	Cool to 4°C	8260	10,000
Benzene	3 x 40mL glass vials	Cool to 4°C	8260	5
Chloroethane	3 x 40mL glass vials	Cool to 4°C	8260	5
Ethanol	3 x 40mL glass vials	Cool to 4°C	8260	400
Vinyl Chloride	3 x 40mL glass vials	Cool to 4°C	8260	10
TICs	2 x 1 L amber glass	Cool to 4°C	8270	N/A
Iron (total and dissolved)	250mL plastic	HNO ₃ , pH<2	6010	50
2-Chloroacetate	250 mL plastic	Cool to 4°C	300.0	1,000
Acetate	250 mL plastic	Cool to 4°C	300.0	1,000
Alkalinity	250 mL plastic	Cool to 4°C	310.1	100
Chlorides	125 mL plastic	Cool to 4°C	925.1	1,000
Nitrate (as N)	250 mL plastic	Cool to 4°C	353.2	100
Sulfate	125 mL plastic	Cool to 4°C	9038	5,000
Sulfide	8oz plastic	Cool to 4°C	376.1/9030/9034	1,000
TOC	2 x 40 mL amber glass vials	H2SO4 pH<2	9060	1,000
Carbon Dioxide	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride	RSK 175/ AM20GAX	110 / 5000
Carbon Monoxide	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride	RSK 175/ AM20GAX	50 / 1000
Ethane	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride or Trisodium phosphate	RSK 175/ AM20GAX	1260 / 0.025

Parameter	Container Type	Preservation Method	Analytical Method ⁽²⁾	Concentration Limit ⁽³⁾ (ug/L)
Ethene	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride or Trisodium phosphate	RSK 175/ AM20GAX	760 / 0.025
Methane	3 x 40mL glass vials 3 x 40mL glass vials 3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride or Trisodium phosphate	RSK 175/ AM20GAX	20 / 0.1
Oxygen	3 x 40mL glass vials	Cool to 4°C / Benzalkonium chloride	RSK 175/ AM20GAX	110 / 500

- (1) As per VI.G.9, pH and specific conductance will be measured as standard indicator parameters of groundwater contamination which will be used to indicate well integrity and possible groundwater contamination.
- (2) Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition (EPA Publication Number SW-846, 1986 as amended): must be in accordance with the latest edition of SW-846.
- (3) Unless otherwise denoted by footnotes 4 and 5, these concentration limits are based on the Practical Quantitation Limit (PQL). The Permittee must report to the Administrative Authority, any detectable level of compounds on Table 2, even if lower than the PQL. PQL denotes the lowest analyte concentration in a given matrix (groundwater) that the Administrative Authority believes a competent lab can be expected to achieve consistently. Samples must be analyzed using an SW-846 method that meets the listed detection limit.

ATTACHMENT 1

ATTACHMENT 1
LIST OF FACILITY DOCUMENTS INCORPORATED
IN THE PERMIT BY REFERENCE
LAD001700756
AI#1096

DOCUMENT TYPE	APPLICATION /DOCUMENT DATE	ELECTRONIC DATABASE MANAGEMENT SYSTEM (EDMS) DOCUMENT ID	COMMENTS
Arrangement with Local Authorities	2/15/2007	35728857	Annual update of the Facility Contingency Plan and Arrangements with local authorities
Post-Closure Cost Estimates	12/27/2006	35590061	Appendix I, Page 123.
Post-Closure Plan	12/27/2006	35590061	Appendix F, Page 72.
Sampling and Analysis Plan (Soil and Groundwater)	12/27/2006	35590061	Appendix J, Page 133
Contingency Plan	2/15/2007	35728857	Annual update of the Facility Contingency Plan and Arrangements with local authorities
Inspection Plan	9/24/2004	32422923	Appendix C, Page 276.
Security Plan	9/24/2004	32422923	Appendix B, Page 272